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## Constitutional Amendment for Creationism Filed!

California Representative William E. Dannemeyer filed a "Community Life" constitutional amendment in the House of Representatives on June 15, 1989. This Amendment is intended to reverse four Supreme Court decisions which in Dannemeyer's opinion have "kicked God out of our public schools," an event that led to "materialistic attitudes, child abuses, teenage pregnancies and abortions." Among the decisions which have "effectuated this moral and ethical decline" is the 1987 *Edwards v Aguillard* creationism decision, which "held that the theory of divine creation of the earth could not be taught in public schools on equal footing with the theory of evolution."

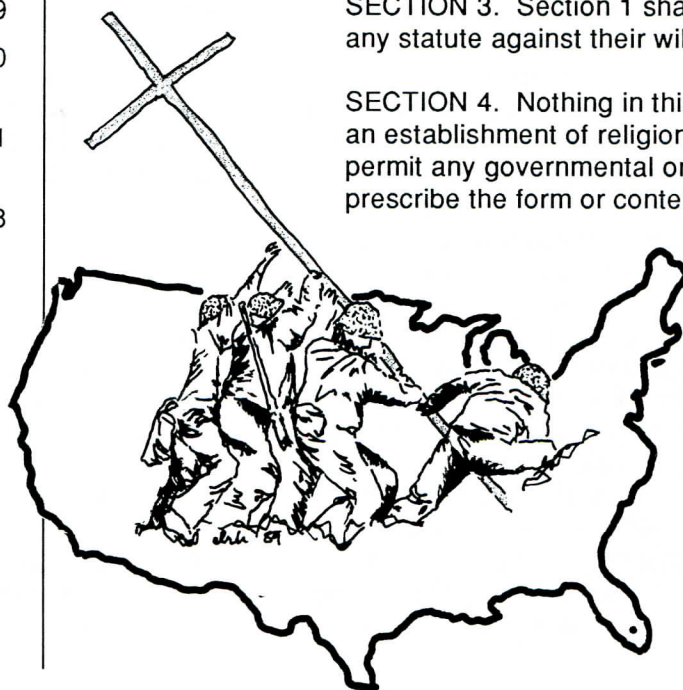
The Community Life Amendment reads as follows:

SECTION 1. The right of the people to allow voluntary school prayer and the teaching of the Judeo-Christian ethic in public schools shall not be denied or abridged by the United States.

SECTION 2. For the purpose of section 1, the term "teaching of the Judeo-Christian ethic" shall include the Ten Commandments, and the creation of the earth as accepted in Judeo-Christian tradition.

SECTION 3. Section 1 shall not force the people to enact any statute against their will.

SECTION 4. Nothing in this Amendment shall constitute an establishment of religion, nor shall this amendment permit any governmental or administrative authority to prescribe the form or content of any voluntary prayer.



The Amendment has 34 co-sponsors, and will go first to the Judiciary Committee's Subcommittee on Constitutional and Civil Rights. If it passes in the House and Senate, it will go to the States for ratification, requiring 34 state legislatures to approve it.

What is the future of this bill (HJ Res 297)? It could get killed quickly in committee, it could be bottled up in committee and linger, or it could eventually go to the floor of the House. If it does, it has a depressingly high probability of passing. There is much enthusiasm among a substantial minority of voters for a prayer amendment, and a large number of voters are indifferent. This creates considerable pressure upon legislators to treat the topic gingerly. In May, the Perkins Vocational Education bill was passed, with an amendment by Rep. Dannemeyer which denied money to any state or district "which has a policy of denying or which effectively prevents participation in prayer in public schools by individuals on a voluntary basis." The amendment passed by a lopsided 269 - 135. The likelihood is that representatives voted for it to avoid fundamentalist pressure, expecting the measure to be killed in a conference with the Senate. The Education Committee's ranking Republican, Bill Goodling (PA) is quoted in the Congressional Quarterly as saying, "The staff and I positively don't have time to try to explain (a 'no' vote) to probably 30,000 people in my district who would be saying Goodling is opposed to prayer in school." Can we count on the bill to die a quick death?

Even if the bill eventually dies in the Senate (traditionally more insulated from pressure-group politics than the House), it will cause much mischief for us until that time. The religious right is smarting from Reagan's having promised them the moon and given them little, and is even more disappointed that Bush hasn't even promised them much. They are looking for a cause, and Dannemeyer has given them one. Those of us supporting evolution need to watch for and respond to letters in the local newspapers, discussions on talk shows, and any other support shown for the Dannemeyer amendment. A major problem for us is that this controversy will tend to legitimize "scientific" creationism, and much misinformation will be disseminated. Let NCSE know what you hear about the "Community Life Amendment."

#### **Members of the House Judiciary Committee:**

J. Brooks, TX, Chairman;  
Kastenmeier (WI); D. Edwards (CA);  
Conyers (MI); Mazzoli (KY); Hughes  
(NJ); Synar (OK); Schroeder (CO);  
Glickman (KS); Frank (MA); Crockett  
(MI); Schumer (WY); Morrison (CT);  
Feighan (OH); Smith (FL); Berman  
(CA); Boucher (VA); Staggers (WV);  
Bryant (TX); Cardin (MD); Sang-  
meister (IL); Fish (NY); Moorhead  
(CA); Hyde (IL); Sensenbrenner  
(WI); McCollum (FL); Gekas (PA);  
DeWine (OH); Dannemeyer (CA);  
Cobble (NC); Slaughter (VA); Smith  
(TX); Smith (MI); Douglas (NH);  
James (FL)

#### **Newsletter Editor Roelfs Resigns**

Dr. Frances C. Roelfs, *NCSE Reports* editor, announced her resignation due to pressing personal and professional matters. Dr. Roelfs has had some health problems this spring, as well as major research commitments, including overseas travel. As a result, Frances feels she cannot devote sufficient time to NCSE, and regrettably has resigned. She will continue as NCSE's liaison in Arkansas, and continue to support and help NCSE in as many ways as she can.

We will miss Frances' good advice on the Board of Directors, and her energy and judgement. We thank her for taking on the task of redesigning the newsletter, and wish her the best of luck in the future.

A new editor will be chosen soon, but in the meantime, please send all editorial correspondence to the Executive Director, at the NCSE central office.



## Welcome to New Members

John R. Cole, President, NCSE

In the past year NCSE has undergone a number of changes, the most important of which is an increase in membership, adding many new people to the organization at a most auspicious time. At a time when anti-evolutionism has slipped out of the national headlines, that movement seems to be quietly growing at the grassroots level. As the only national organization specializing in the creation-evolution controversy, it is more important than ever to get our message across --and to get messages *in* from people who learn of problems arising in their local areas.

NCSE is committed to strong science education, especially where it relates to evolution, and to a better understanding of the nature and process of science as an exciting and valuable way of knowing. We need to be advancing good science, building coalitions with other organizations, and reaching beyond schools to the media, churches, colleges and general public where attitudes toward science are largely formed. As headlines mount about scientific illiteracy and the loss of America's leadership in science and technology, our mission is ever more timely. But, however much I think that technical and economic worries need to be addressed, I also agree with the late Richard Feynman who argued that science was humanity's greatest adventure. Policy makers need to be sold on the wonders of nature, not just claims about catching up with Sputnik or out-selling Japan in the widget market.

I hope new members and old will help NCSE move towards the goals outlined in *Reports* 9:(1) by Past President Wayne Moyer. As the new President, I am anxious to do what I can to help NCSE evolve. We've already come far, but there is a huge task ahead.

## NCSE Meets 12,000 Science Teachers

NCSE had a booth at the April National Science Teachers Association convention in Seattle. The NSTA meeting was attended by 12,000 teachers and others in science education, making it the single largest meeting of educators in the country. Our booth was well-visited, and many who stopped to talk referred their friends and colleagues to us. Teachers from all over the country told us of the various creationist challenges they are meeting in their classrooms. We were able to provide flyers and brochures to these teachers, as well as to those who just wished to be prepared. In addition, samples of *Bookwatch Reviews* were available, and received many enthusiastic comments.

The situations of many teachers require our help, both with information, and with moral support. And we can certainly use teachers' help, as they are in the ideal position to monitor, report -- and change -- what is really going on in classrooms. Those who visited the booth have received sample newsletters -- we hope many will join us.

## Bulk Mail Blues

According to a story in the *Oakland Tribune* ("Bulk Mail: Lost in Transit", 6 March 1989, Lee Gomes), a significant amount of bulk mail doesn't get to where it's going. In fact, in the western US, there is a 21% non-delivery rate. In a 1987 study of 240 post offices, three-quarters of them had bulk mail in the rubbish bins. While this class of mail is often called "junk mail," you know some of it by another name: *NCSE Reports*. If you ever miss an issue, please let us know. We'll be happy to send along a new one.

## Johnnetta Cole Becomes NCSE's Newest Supporter

NCSE's newest enrollee in our roster of Supporters, Dr. Johnnetta B. Cole, is President of Spelman College in Atlanta, a post she assumed last year after many years as an anthropologist at the University of Massachusetts and more recently at Hunter College in New York City.

Dr. Cole is recognized for her effective advocacy of and contributions to the education of women and minorities and her dedication to quality education for all students. Last year she became the first African-American woman to be President of the prestigious, predominantly Black, Spelman College in Atlanta. Her inauguration was marked by a gift of \$20 million to Spelman from Bill Cosby and nationwide recognition of her assumption of a high-profile role as "Sister President."

As an anthropologist, Dr. Cole has done extensive work in Cuba and Africa as well as in the United States on race, gender, and politico-economic issues. She is a leading national advocate of opening up education to people traditionally ill-served by the

*status quo*. Women and minorities have traditionally been deterred from science careers, formally and informally, and Dr. Cole is a well-known spokesperson to the contrary.

A Florida native, Dr. Cole studied at Fisk and Oberlin (B.A., Sociology) and Northwestern University (MA and Ph.D. in anthropology). Two of her books are used in colleges across North America--*All American Women: Lines That Divide, Ties That Bind* (1986), and *Anthropology for the Nineties: Introductory Reading* (1988).

Among other affiliations, she is a member of the AAAS Advisory Board, the Smithsonian Council, and a Director of the W.E.B. DuBois Foundation, the Atlanta Chamber of Commerce, the Global Fund for Women, The Atlanta Symphony, the Center for Cuban Studies, the Davis-Putter Fund, the Feminist Press, and the South African Relief Organization.

As one of America's leading educators and scientists, Dr. Cole's support is especially appreciated.

It might be added that NCSE President John R. Cole is not a relative, although he regrets it and is proud to be a friend and former UMass colleague.

## LETTERS

### Response to the New Format

We were anxious to see the response to the new newsletter format. Here is what we have heard so far:

I thoroughly enjoy your *NCSE Reports*. I sat down and read the entire thing straight through.

-- Dan Barker

...I like the format, I like the content. Without belaboring each issue, it presents a precise view of activities going on throughout the nation. While keeping an eye on creationists, the *Report* indicates a broader challenge for NCSE likely to be attractive to a larger number of people, particularly those who have grown weary of "creationist bashing". ...a real service is done when threats are publicized and people acquainted with the extensive and insidious intrusion of creationism and, indeed, of other pseudosciences into public school classrooms. I regard the *Reports* as a suitable Paul Revere for our times and a much needed one.

-- William V. Mayer, President Emeritus, BSCS



Looks very nice, and as usual chocked full of useful and informative materials.

-- Robert J. Meier

Please count one long-time subscriber who hopes that the new look is not a stable, evolved phenotype, but the result of a dominant lethal mutation that will be removed from the population in one generation....Please bring back the old sprawling, lively, eclectic, disputatious, informative newsletter.

-- Michael P. Donovan

When the first issue arrived, I rushed through supper and settled in for my usual ritual, a thoughtful 2+ hours thoroughly consuming the tasty morsels of *C/EN* renamed. Yet merely 30 minutes later...I was still hungry! ...Where's the Beef?! .... Missing now

are the numerous informative capsule news accounts; the supplemental discussions of obscure evidence for evolution; the insightful, oft humorous member-at-large reports of personal confrontations with creationists; the provocative philosophical exchanges regarding vital peripheral issues; the reports and refutations of new (and new refutations of old) creationist arguments; the sheer volume of words! The 24 pages of our new *Reports* have enough white space for at least half again more material!

-- Frank Lovell, Kentucky Liaison

The new newsletter looks great (less cluttered than before), and I think the change in name was a good idea. Keep up the good work.

-- Stewart Tick

## Library in India Needs Books to Combat Creationism

We have recently received an urgent plea from the Thinker's Library in Kerala, India for materials opposing "scientific" creationism. They have received packets of creationist literature, and need to counter them. The books at right have been specifically requested.

If you have extra copies of any of these books (or would like to buy copies), please send them to:

V.A.M. Ashrof, Librarian  
Thinker's Library  
Valiveetil, Ward: 3  
Edavanakad, 682 502, Kerala  
INDIA

Ask at the post office about foreign book rate.

Let us know what you send, and we will let the library know what is coming. This is a great opportunity for a small gift to make a large difference.

Eldredge, N. 1982. *The Monkey Business: A Scientist Looks at Creationism*, New York: Washington Square Press (Pocket Books).

Frye, R.M., ed. 1983. *Is God a Creationist? The Religious Case Against Creation Science*, New York: Charles Scribner's Sons.

Futuyma, D.J. 1983. *Science on Trial: The Case for Evolution*, New York: Pantheon Books.

Godfrey, L.R., ed. 1983. *Scientists Confront Creationism*, New York: W.W. Norton.

Kitcher, P. 1982. *Abusing Science: The Case Against Creationism*, Cambridge, MA: MIT Press.

Lewin, R. 1982. *The Thread of Life: The Smithsonian Looks at Evolution*, Washington, DC: Smithsonian Books.

Newell, N. 1982. *Creation and Evolution: Myth or Reality?*, New York: Columbia University Press.

<p><b>EXCHANGE</b></p>
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## CC UPDATE

### Creationism Bill Filed in Missouri

Springfield Representative Jean Dixon and 31 co-sponsors filed a pro-creationism bill in the Missouri legislature in February, 1989. The bill allows any school district to develop "a science curriculum enhancement program" which could include the teaching of creationism. According to an article in the *Springfield News-Leader*, Dixon said of her permissive bill, "If anyone wishes to teach creation science and someone says it's unconstitutional, this law would give them something to fall back on." The article continued, "Dixon said teaching the Biblical story of creation cannot be left to parents and clergymen because many children don't attend church. 'All I'm saying is let's not be one-sided about this. Let's give equal time to both theories (creation and evolution). Because they are both theories --neither one has ever been proved to be fact.' "

Although the bill had little chance of getting out of committee, having been filed so late in the season, Dixon has strong constituent support for the bill. "When I was campaigning, a lot of people said to me, 'What can we do about teaching creation science?'"

A partial text of the bill is as follows: (italics ours)

#### House Bill No. 930

Section 1. Any school district in this state may develop a science curriculum enhancement program to introduce students in the various science courses offered in the district to scientific philosophical and theoretical concepts not normally included in basic science text books at the elementary and secondary level. Such philosophical and theoretical concepts may include general and special relativity, quantum mechanics, astrophysics,

particle physics, superstring theory, *possible causes for the derivation and development of the universe and of life including both evolutionary (sic) development through natural selection and development initiated and continued through a sentient entity*, gravity waves, unified field theory, alternative realities, molecular biology, symmetries, grand unified theory, superconductors and cosmology.

NCSE member and Supporter James Gavan writes that the bill was killed in committee, but that the expectation is that it will surface again during the next legislative session. Gavan and Missouri liaison Ransie Traxler will keep us informed on this matter.

### Request for Information: Update on "World History Chart"

Readers Waldon L. Johnson and Art Schneider inform us that there is a second "World History Chart," appropos the article in *NCSE Reports* 9:(2). That article dealt with an 8-foot long chart heavy on Mormon theology supposedly suitable for classroom use. The chart was being advertised in *Scientific American* and *Discover*. Johnson and Schneider cited a Barnes and Noble 15 1/2-foot chart which is advertised (in *Science News*) as a reproduction of a 19th century museum piece. This is "The Wall Chart of World History," and from the picture in the advertisement is colorfully illustrated. It, too, claims to refer to "Biblical heros and Pagan gods," but we cannot tell from the advertisement whether it is biased towards any particular religious beliefs.

The chart is recommended for classroom use, just as is the Mormon one. Has anyone seen a copy, and can someone evaluate it for us?

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*If children need to be taught the Bible version of creation in school because not enough of them are attending church, does that mean that Sunday Schools can be asked to teach evolution because so few textbooks cover it adequately?*

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## ***Science Held Hostage*** by Howard J. Van Till

reviewed by Scott Faust

Van Till, the editor and principal author of this book, is an astro-physicist. Co-authors Young and Menninga are geologists. All are faculty at Calvin College which belongs to the theologically conservative Christian Reformed Church. Their work on science and Scripture issues has stirred intra-denominational controversy, but an inquiry initiated by Calvin College trustees found it to be within an acceptable range of scholarship (see *Creation/Evolution Newsletter* 8(4): 16, 8(3):7, 8(2):11, 7(6):10, 7(5):10). Other works by these authors include *Creation and the Flood* and *Christianity and the Age of the Earth* (Young), and *The Fourth Day: What the Bible and the Heavens Are Telling Us about the Creation* (Van Till). Young is apparently a progressive creationist (according to Fezer's reading of his *Creation and the Flood*) and Van Till a theistic evolutionist. All accept an ancient earth.

The authors of *Science Held Hostage* are concerned that science (they limit themselves to discussion of the natural, as opposed to the social or psychological, sciences) be distinguished from broader philosophical concerns:

"The troublesome tendency with which we are dealing here is the temptation to employ natural science for the purpose of supporting preconceptions drawn from one's philosophical commitments or system of religious beliefs ... Science held hostage by any ideology or belief system, whether naturalistic or theistic, can no longer function effectively to gain knowledge of the physical universe ... The superficial activity that remains may no longer be called natural science. It may be termed 'world-view warranting' or 'creed

confirmation' or ... 'folk science', but ... it is no longer capable of giving birth to knowledge."

Chapter one, written by Van Till, discusses "the *domain* of scientific inquiry, (which) is restricted to the inherent intelligibility of (the physical) universe." Specifically, natural science deals with the physical properties, physical behavior and formative history of natural objects and associated processes. Questions of *formative history*, which take the existence of the universe for granted and address the manner in which various structures are formed within that context, are contrasted with questions of *ultimate origin*: "Questions of origin -- the ultimate source of existence itself - are profoundly important questions. Their answers, however, will never be derived from the results of natural science. They are religious questions...."

Evolutionary Naturalists (the term identifying a philosophical position) are charged with violating the domain of science in chapters critiquing P. W. Atkins book *The Creation* and Carl Sagan's "Cosmos." Van Till's analysis of "Cosmos," for instance, identifies a philosophical agenda not openly acknowledged as such: "Ignoring the distinction between *formation* and *origin*, Sagan treated scientific descriptions of the formative history of the universe as if they were superior replacements for the theistic concept that God is the source for the very existence of the universe."

"Creation science" is shown to violate the values of science, repeatedly and egregiously, in critiques of four typical ICR-type young earth arguments. Van Till debunks "The Legend of the Shrinking Sun" in a chapter bristling with citations to the relevant data and reports -- which creationists have ignored. Menninga deals with "Footprints on a Dusty Moon," and "timeless Tales from the salty Sea"

## RESOURCES

### BOOKS

with like thoroughness and documentation. The longest chapter of the section, wherein Young examines the Flood geology of the Grand Canyon, is too short for full coverage, but manages to demonstrate the dismal standards of "creation science" in this realm as well.

This is an accessible and well-written book. It is an excellent tool for "witnessing to" those who have been led to believe that they must reject certain of the conclusions reached by modern science, as well as a help in maintaining a proper restraint in the "exegesis" of science by those coming from a perspective of philosophical naturalism. Philosophical Naturalists and Theists believing in the metaphysical neutrality of science can join in applauding both these ends.

### ***Science as a Way of Knowing***

#### ***Evolutionary Biology***

The first volume of *Science as a Way of Knowing*, *Evolutionary Biology*, was sent to all NCSE members (who had joined by January 1, 1989) earlier this spring. Subscribers who would like a copy, or members who would like an extra copy, may get one (while supplies last) by sending \$2 to cover postage and handling to NCSE.

#### ***Conceptual Framework for Biology***

The sixth volume of *Science as a Way of Knowing* is also now available. Its 76 organizing statements provide a conceptual framework for college biology, based on "the evolutionary history of earth and life." Copies may be obtained from Mary Adams-Wiley, American Society of Zoologists, 104 Sirius Circle, Thousand Oaks, CA 91360.

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## ***JOURNALS & ARTICLES***

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### ***Geotimes Features Dinosaurs***

The May, 1989 issue of *Geotimes*, published by the American Geological Institute, is a special issue on dinosaurs. In addition to scientific articles on various aspects of dinosaurs, there is a discussion of popular college classes on dinosaurs as a means for geology departments to raise flagging enrollments (and teach a lot of geology).

### ***Journals of Interest***

***The Bulletin of the Tychonian Society***, No. 49, Spring 1989 has arrived. Dedicated to geocentrism, this journal is also a fine source of news about internecine creationist debates and schisms. Much of each issue is devoted to what is going on behind the scenes at BSA, ICR, CRS, etc. where geocentrism is often considered a tad odd. It is free, although contributions to cover expenses are appreciated. Editor: Dr. Gerardus D. Bouw, 4527 Wetzel Avenue, Cleveland, OH 44109.

***Flat Earth News*** is in somewhat hard times, one gathers, although editor Charles Johnson remains unwavering. He has published material which makes the ICR look like a Nobel Prize mill, and he is very disdainful of "greasy slime-ball round-earth geocentrists." He has proof that NASA's moon landing was faked and a photograph of his wife in Australia in which she is right-side up and not hanging by her toes.... Write the International Flat Earth Research Society (of Covenant People's Church), Box 2533, Lancaster, CA 93539 for a sample --send a big SASE. They really do continue the 19th Century Zetetic Society movement. They disdain the hollow earth theory, by the way, because how can a flat surface be hollow, let alone have a North Pole exit for UFOS which come from inside? It can make you stop and think.



## Controversial Evolution Article

**"A Challenge to Evolutionary Biology," by Anne Simon Moffett, *American Scientist* 77:224-226, May-June 1989**

Can organisms respond to environmental pressures by reorganizing their genes to adapt to new conditions in a purposful way? Without high-tech genetic engineering or a lawsuit by Jeremy Rifkin? Several recent publications continue this long-standing debate with which Darwin and Lamarck struggled, ignorant of particulate genetics, but usually considered settled by the triumph of the "New Synthesis." Religious and philosophical wishful thinking aside, the debate continues with vehemence in the work of several respected, if certainly unorthodox, researchers who argue for directed mutation.

John Cairns of the Harvard School of Public Health says "Organisms can sometimes control their own evolution...." Writing in *Nature*, Cairns reports on his studies of *E. coli* bacteria which seem to show the bacteria making "corrective mutations" at a rate vastly greater than would be expected by random chance -- the traditional assumption about mutations. In *Genetics* Barry G. Hall of the University of Connecticut reports on experiments in which *E. coli* developed the ability to use salicin as an energy source via twin, complicated mutations which occurred at a rate more than one billion times predicted by chance. As both authors and their supporters admit, these results could be somehow their misinterpretations or perhaps accurate but trivial aberrations. Both stress that they are not talking about traditional ideas about inheritance of acquired characteristics à la Lysenko, but rather about a possibly phenomenal rate of DNA "self-proofreading" and correction to weed out deleterious errors.

## Print, Audio Resources Available

The Resource Center is NCSE's program to bring information to the public. Through the Resource Center, NCSE members, teachers, parents, interested citizens and members of the press can get information about the creation/evolution controversy, evolution education, and education in the nature of science. Many articles are available on both general as well as specific topics in the creation/evolution controversy, including specific creationist arguments, legal aspects, religious aspects, and so on.

We get calls from people all over the country seeking more information on some aspect of creation/evolution, and thus far (thanks to grants and donations) we have been able to send them free brochures, photocopies of articles and essays, or bibliographic materials to guide them to more information. (As the number of requests increase, we may have to begin charging for copying and postage, however.) The most poignant calls to the Resource Center, of course, are those from teachers looking for support against creationism-teaching colleagues or -- worse yet -- administrators. In addition to articles and brochures, we also provide information on dealing with creationism on the local level -- and of course, the names of the closest Committee of Correspondence that can back them up.

Another part of the Resource Center is the sale of books, tapes, and transcripts as listed in the centerfold of *NCSE Reports*. These are available at discount only to members, and are a popular member benefit. Some have questioned why we don't carry a particular book: we welcome suggestions for new titles, but because we are small purchasers, not all publishers will give us the discount we require to break even on the service. Give us your suggestions.

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## NCSE RESOURCE CENTER

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**Plenty of brochures are still available!**

*Education and Creationism Don't Mix, Origin Myths* (R. Carneiro), *The Record of Human Evolution* (E. Delson), and *"Scientific Creationism", Evolution and Race* (E.C. Scott).

Single copies are free, but please enclose SASE (\$0.25 for one or two brochures, \$0.45 for the set) with your request. Extra copies cost \$0.25, or \$0.20 for 100+.



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## SYMPOSIA

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### One Day Course on Dinosaurs to be Held in St. Louis

Kevin Padian

On Sunday, November 5, 1989, at the Annual Meeting of the Geological Society of America (St. Louis) a Short Course on Dinosaurs will be sponsored by the Society of Vertebrate Paleontology and the National Association of Geology Teachers.

Although designed for college instructors, the material assumes no real in-depth background and will be suitable for interested high school teachers, editors, publishers, and fans. Non-major courses on dinosaurs have been springing up on campuses around the country with considerable success: instructors find that they enroll hundreds of students, who come for the dinos but stay for the other lessons about continental drift, tectonics, molecular evolution, and systematic theory. Quite frequently, such a course motivates students to take additional life science and earth science courses, and almost always leaves the student better informed about science as a whole.

Twelve specialists on life in the Age of Dinosaurs will present their lessons on aspects ranging from fossil plants to extinction, and there will be ample time for discussion and fraternizing. A book of Short Course Notes, published by the Paleontological Society, will be available at the door and afterward for a nominal fee, but there is no other cost for attending. The course will run from 8:15 to 5:30 in the Adam's Mark Hotel. You need not register for the GSA meeting in order to attend. However, we need to have an accurate estimate of attendance in order to equip a room of adequate size. If you plan to attend, please send a postcard to Kevin Padian, Museum of Paleontology, University of California, Berkeley, CA 94720-2399, by the end of July.

### BSCS Symposium Transcript

In November 1988 the Biological Sciences Curriculum Study held a symposium addressing science curriculum development in the year 2000. Topics included demographics, curriculum content, learning theory and educational technology. Proceedings of the symposium are available for \$2 postage and handling from BSCS, Attn: Year 2000, 830 North Tejon Street, #405, Colorado Springs, CO 80903.

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## TELEVISION

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You know about Nova, but there are other good science shows on television that you might enjoy watching. Check your local listings for *Innovation*, presenting reports on the latest advances in the fields of health, science, and technology. *Innovation* is a half-hour show, usually shown Sunday evenings, produced out of WNET-TV in Newark, NJ. *Science Journal* comes out of WETA-TV in Washington, and is a half hour discussion-format program of science, medicine and technology. If you wait until October, you can catch the monthly *Discover: The World of Science*, presenting a magazine-format hour of science features hosted by *Mission Impossible's* Peter Graves. *Discover* is aired from October through February.

All these shows, needless to say, will be found on your local public television channel, not commercial TV. In an interview in *SIPIScope*, Nova's executive editor Bill Grant commented, "If *Nova* went on commercial TV, we would have to promise some science and give them 'Big Foot.' *Nova* has 11 million viewers; commercial TV would want 30 million. They want 'That's Incredible', or 'Ripley's Believe It Or Not' or '60 Minutes'....We could bargain with the devil and give away the heart and soul of the series. Every week we would have volcanos, hurricanes, sharks and polar bears, and Kennedy assassinations. Then our audience would increase by 40 percent. And *Nova* would not be *Nova*."



\*Dawkins, Richard, *The Blind Watchmaker: Why the Evidence for Evolution Reveals a Universe Without Design*, Norton, 1986,  
H-\$18.95, ISBN O-393-02216-1  
P-\$7.95, ISBN O-393-3448-5.

Eldredge, Niles, *The Monkey Business: A Scientist Looks at Creationism*, Washington Square Press 1982.  
P-\$3.95, ISBN O-671-53141-7

\*Frye, Roland M., *Is God a Creationist? The Religious Case against Creation-science* Scribner's, 1983.  
P-edition by Macmillan, ISBN O-02-339560-5.

\*Futuyma, Douglas J., *Science on Trial: The Case for Evolution*, Pantheon Books, 1982.  
H-\$16.00, ISBN O-394-52371-7;  
P-\$8.95, ISBN 0394-70679-X.

Gilkey, Langdon, *Creationism on Trial: Evolution and God at Little Rock*, Harper and Row, 1985.  
P-\$12.95, ISBN O-86683-780-9.

\*Godfrey, Laurie, R., ed., *Scientists Confront Creationism*, W.W. Norton, 1983.  
P-\$8.95, ISBN O-393-30154-0.

Hanson, Robert, ed., *Science and Creation: Geological, Theological and Educational Perspectives* Macmillan Publishing Co., 1985.  
H-\$24.95, ISBN O-02-949870-8.

Kitcher, Philip, *Abusing Science: The Case against Creationism*, The MIT Press, 1982.  
P-\$8.95, ISBN O-262-61037-X.

Larson, Edward, *1983 Trial and Error: The American Controversy over Creation and Evolution*, Oxford University Press, 1985.  
H-\$21.95, ISBN O-19-503666-2.

\*McGowan, Chris, *In the Beginning: A Scientist Shows Why the Creationists Are Wrong*, Prometheus Books, 1984,  
P-\$12.95, ISBN O-87975-240-8.

\*McIver, Tom, *Anti-Evolution, An Annotated Bibliography*, McFarland & Company, Inc., 1988.  
H-\$39.95, ISBN O-89950-313-6.

\*Montagu, Ashley, ed., *Science and Creationism*, Oxford Univ. Press, 1984.  
H-\$35.00, ISBN 019-503252-7;  
P-\$13.95, ISBN O-19-503253-5.

National Research Council, *Science and Creationism: A View from the National Academy of Sciences*, National Academy Press, 1984.  
P-\$4.00, ISBN O-309-03440-X.

Nelkin, Dorothy, *The Creation Controversy: Science or Scripture in the School*, Norton, 1982.  
H-\$16.95, ISBN O-393-01635-8;  
Beacon Press, 1984.  
P-\$9.95, ISBN O-8070-3155-O.

Newell, Norman D., *Creation and Evolution: Myth or Reality* Columbia University Press, 1982. H-\$25.00,  
ISBN O-231-05348-7  
Praeger, 1984.  
P-\$9.95, ISBN O-275-91792-4.

Pastner, Stephen and William Haviland, eds., *Confronting the Creationists*, American Anthropological Association, 1982.  
H-\$6.00, ISBN 0-317-66352-6.

Ruse, Michael, *Darwinism Defended: A Guide to the Evolution Controversies*, Benjamin- Cummings, 1982.  
P-\$24.95, ISBN O-201-06273-9.

\*Ruse, Michael, *But Is It Science? The Philosophical Question in the Evolution-Creation Controversy*, Prometheus Books, 1988.  
H-\$23.95, ISBN O-87975-439-7.

\*Strahler, Arthur N., *Science and Earth History: The Evolution/Creation Controversy*, Prometheus Books, 1987.  
H-\$39.95, ISBN O-87975-414-1.

Walker, K.R., ed., *The Evolution-Creation Controversy*, Paleontological Society, Special Publication #1, 1984.  
P-\$6.50, ISBN O-9131377-00-5.

Wilson, David B., ed., *Did the Devil Make Darwin Do It?* Iowa State University Press, 1983.  
P-\$14.95, ISBN O-8138-0434-5.

Young, Willard A., *Fallacies of Creationism*, Detselig Enterprises (Calgary), 1985. ISBN O-920490-54-0

## Take This to Your Library

This list of books critical of "scientific" creationism is reprinted from The East Bay Skeptics newsletter. It appears to be quite complete. Books with an asterisk are those which NCSE members can get at discount. (H) stands for hard cover, (P) for paperback. ISBN is the international standard book number. Data is from *Books in Print 1989-90*.

Ask your local public library to get some of these books.

## t a p e s

### symposium tapes

1989 Annual Meeting, Full Symposium <i>"Only a Theory": Presenting Evolution to the Public</i>	(2 tapes)	\$8.00
1988 Annual Meeting <i>Meeting the Challenge of Creationism</i>	(2 tapes)	\$8.00
<i>Teaching Evolutionary Theory</i>	(2 tapes)	\$8.00
1987 Annual Meeting, Full Symposium <i>Scientific Creationism: Facing Up to It!</i>	(3 tapes)	\$12.00
1988 AAAS Pacific Division Symposium <i>Communicating Evolution to the Public</i>	(3 tapes)	\$12.00
1982 AAAS Pacific Division Symposium <i>Evolutionists Confront Creationists</i>	each	\$3.00
John Patterson, <i>Probability &amp; Thermodynamics</i>		
Robert Root-Bernstein, <i>History &amp; Philosophical Issues</i>		
Russell Doolittle, <i>Origin of Life</i>		
Brent Dalrymple, <i>Age of the Earth</i>		
Joel Cracraft, <i>Systematics &amp; the Fossil Record</i>		
Vince Sarich, <i>Human Evolution</i>		
William Thwaites, <i>General Discussion &amp; Questions</i>		

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1977 Awbrey/Thwaites/Morris/Gish	(3 tapes)	\$12.00
1979 Milne/Gish	(2 tapes)	\$8.00
1982 Awbrey/Thwaites/Kofahl/Chui	(3 tapes)	\$12.00
1987 Fezer/Doughty	(2 tapes)	\$8.00
1988 Thwaites/Gish	(3 tapes)	\$12.00
1988 Saladin/Gish	(2 tapes)	\$8.00

### lecture

1976 K. Mather, The Scopes Trial	(1 tape)	\$4.00
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## n e w - t r a n s c r i p t s

1984 Saladin/Gish (Evolution vs. Creationism)	\$6.75 ppd
1989 Zindler/Morris (Noah's Flood)	\$3.50 ppd

## n e w - v i d e o t a p e

1989 AAPA Meeting - "Debate"	
<i>"Science Showdown" - C. Darwin vs. P.D.Q. Piltdown</i>	
10 day loan	\$10 ppd
purchase	\$20 ppd

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CA residents please add 7% tax \_\_\_\_\_

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## Two new debate transcripts are now available

*"Evolution vs. Creationism," a debate between Dr. Kenneth S. Saladin and Dr. Duane T. Gish, at Auburn University 24 March 1984. 8 1/2 x 11, 72 pp.*

A wide-ranging debate. The transcript includes a detailed table of contents (by topic), as well as clippings of newspaper coverage and ICR response to the debate.

*"The Question of Noah's Flood: A Debate," between Frank R. Zindler and John D. Morris, on "AM Indiana," The Dick Wolsie Show 13 February 1989. 5 1/2 x 8 1/2, 52 pp.*

This was a televised debate focusing on the Flood. The transcript is thoroughly annotated by Zindler.

## P.D.Q. Piltdown vs. Charlene Darwin - On Video!

*Science Showdown*, an amusing creation/evolution "debate" held at the American Association of Physical Anthropologists annual meeting, is available on videotape. Includes appearances by Oprah Donohue (Eugenie C. Scott, NCSE Executive Director), P.D.Q. Piltdown (William Thwaites, former California Liaison), Charlene Darwin (Linda Wolfe), and Billy Joe Pollitzer (William Pollitzer, North Carolina Liaison). Tapes may be borrowed (for 10 days after receipt) for \$10, or purchased for \$20.



# BOOKS

## a classic

### The Blind Watchmaker

Richard Dawkins

"The watchmaker of my title is borrowed from a famous treatise by the eighteenth-century theologian William Paley. His *Natural Theology - or Evidences of the Existence and Attributes of the Deity Collected from the Appearances of Nature*, published in 1802, is the best-known exposition of the 'Argument from Design', always the most influential of the arguments for the existence of God. It is a book that I greatly admire, for in its own time its author succeeded in doing what I am struggling to do now. He had a point to make, he passionately believed in it, and he spared no effort to ram it home clearly. He had a proper reverence for the complexity of the living world, and he saw that it demands a very special kind of explanation. The only thing he got wrong - admittedly quite a big thing! - was the explanation itself. "

## while they last!

We have a limited quantities of two books by "scientific" creationists which we can offer to members at an unusually good discount. Get your "classics" here - read first-hand what they're saying (but help NCSE instead).

### How to Teach Origins

John N. Moore

This book answers the question, "How do you teach creation in a public school?" It contains numerous diagrams and charts of basic principles of creationist and evolutionary interpretation of the "origins" of man and earth, as well as interesting definitions, strategy notes, and a final exam.

### The Twilight of Evolution

Henry M. Morris

Morris claims to show how evolutionary science contradicts not only divine revelation but also basic scientific law.

## ORDER FORM

	LIST	MEMBERS
Asimov, Biographical Encyclopedia of Science and Technology	*39.95	31.95
Blinderman, The Piltdown Inquest	*22.95	18.35
Cohen, Dinosaurs	*9.95	7.95
Cohen, Prehistoric Animals	*9.95	7.95
Darwin, Voyage of the Beagle	6.95	5.55
Dawkins, The Blind Watchmaker	7.95	6.35
Dietz and Holden, Creation/Evolution Satiricon: Creationism Bashed	9.95	7.95
Eiseley, Darwin's Century	6.95	5.55
Frye, Is God a Creationist?	15.95	12.75
Futuyma, Science on Trial	8.95	7.15
Gardner, ed., The Sacred Beetle and Other Great Essays in Science	*24.95	19.95
Godfrey, Scientists Confront Creationism	8.95	7.15
Gould, An Urchin In the Storm	18.95	15.15
Gould, Ever Since Darwin	4.95	3.95
Gould, The Panda's Thumb	5.95	4.75
Gould, Hen's Teeth and Horse's Toes	6.95	5.55
Gould, Flamingo's Smile	8.95	7.15
Gould and Purcell, Illuminations	19.95	15.95
Harold and Eve, Cult Archaeology and Creationism	*20.00	16.00
Hawking, A Brief History of Time	*18.85	15.10
Lewin, In the Age of Mankind	*37.50	30.00
McGowan, In the Beginning... A Scientists Shows Why the Creationists Are Wrong	13.95	11.15
McIver, Anti-Evolution, An Annotated Bibliography	*39.95	33.95
Moore, How to Teach Origins	14.95	8.95
Morris, The Twilight of Evolution	5.95	3.55
Newell, Why Scientists Believe in Evolution		0.25
Quammen, Natural Acts	6.95	5.55
Roadside Geology of AZ,CA,CO,NM,OR,VT,VA,WA,WY	9.95	7.95
Roadside Geology of MT,NY	12.95	10.35
Ruse, But is it Science?	*23.95	19.15
Sattler, Hominids	*15.95	12.75
Strahler, Science and Earth History, the Evolution/Creation Controversy (see below for special shipping fee)	*39.95	31.95
UNESCO, 700 Science Experiments for Everyone	*12.95	10.35
VanDiver, Imprints of Time: The Art of Geology	19.95	15.95
72 Nobel Laureates, Amicus Curiae Brief	6.95	5.55
*cloth or hard cover		

Book subtotal

California residents add 7% sales tax

Shipping: 1.50 for one book

0.50 for each additional book (except Newell)

Strahler book, please add 1.00

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## NEWS

### Creationists' "Glen Rose Man" Proves to be a Fish Tooth (As Expected)

Ronnie J. Hastings, Ph.D.

Readers may have been wondering why they have not heard about "Glen Rose Man," the alleged human who lost a tooth crown which was found by the infamous creationist "mantracker," Carl Baugh, in June, 1987. By late 1987 it had become clear to unbiased scientists that the tooth was most likely a piscine incisiform from a Cretaceous fish that lived in central Texas at about the time of the formation of the famous Paluxy River dinosaur tracks near the town of Glen Rose. Baugh and his strong supporter since 1987, alleged geologist Don Patton, "painted themselves into a corner" as they tried to skirt the piscine evidence for over a year and a half.

Baugh and Patton in February, 1989, finally admitted that their alleged fossilized human tooth (called FSCM) found in June, 1987, was from a fish, as had been told them from the very beginning by many scientists, including myself. Ever since its discovery, Baugh and Patton had touted the humanity of the find in no uncertain terms and had done little or nothing to find corroborative evidence, as such finds demand. On the other hand, between October 1987 and August 1988, I had found corroborative evidence (hundreds of fossilized fish teeth, tooth fragments, and scales as well as a tooth resembling theirs) that the tooth was that of a fish. Scientists from Texas Christian University, the University of Texas at Austin, and the National Museum of Natural History had demonstrated to Baugh and Patton reasons why the tooth was more reasonably piscine than human. Even creationist David Menton of Washington University in St. Louis had shown FSCM to be non-human using an electron microscope.

But until February, 1989, Baugh and Patton had clung to testimonies of dentists, aberrant scanning electron microscope patterns, and questionable lab tests to bolster their case for FSCM being human. Dentists had been called as "experts" early on to attest to the human appearance of the tooth, although scientists pointed out that dentists do very little comparative study of different types of dentition. On the evening of the announcement, Patton attempted to soften the blow by giving a talk on the fact that similarity does not necessarily mean kinship, also a major point in my report, submitted for publication in the journal *Creation/Evolution*. Then both Patton and Baugh wriggled around, doing damage control, emphasizing how they had been lied to and misled by scientists along the way, and how scientific they had been throughout the whole affair. Patton seemed to imply that they were egged on to "show these people wrong." What happened to being guided by the evidence?

It apparently took repeated scans of their tooth by an electron microscope and a sectioning of the specimen by a dental expert at Baylor College of Dentistry in Dallas to make them "throw in the towel." The dentist convinced them that the tooth had non-human features. Baugh and Patton tried to say that they had never been definite on FSCM's being human, a statement which was belied by their 1987 publications on the matter. Promises to report fully on FSCM's identity cannot be taken too seriously, as Baugh and Patton cannot be anxious to publish information on this most embarrassing of many episodes concerning Paluxy creationists.

Fellow creationists monitoring Baugh and Patton's tooth claims over the past year and a half, including John Morris from the Institute for Creation Research and some members of the Bible Science Association, indicated that their judgement of some new mantrack claims made by Baugh and Patton in late 1988 might hinge on the identity of the tooth. (I suppose



the tooth was seen as corroborative evidence). Not only are these newer mantrack claims shabby in and of themselves (certainly in dire need of corroboration), but the tooth claim and the claim of new footprints each must stand on its own. Compare the hominid skeletal material found in Africa seen as such *regardless* of the Laetoli hominid tracks found by Mary Leakey. The hominid bones and tracks support each other only after each has stood on its own under scientific scrutiny.

Using creationist logic, will the latest mantrack claims be abandoned in the wake of the demise of the "human" tooth? By their logic, they should, but, even better, the new mantrack claims should be abandoned because they, like the tooth, do not hold up under scrutiny. They are but rehashes of older claims debunked by Glen Kuban and me.

A basic scientific lesson, that extraordinary claims require extraordinary evidence, has not been learned by the Paluxy creationists even after several years. This criticism applies to both their mantrack claims and, now, the human tooth

claim. Moreover, the important lesson of finding corroborative evidence seems lost upon them, as shown by the "tooth tale," making them far less scientifically credible than the proponents of "Nebraska Man" in the 1920's. And there does not seem to be a lack of the gullible and uninformed to support attempt after attempt at Paluxy to ignore these lessons.

Perhaps the greatest irony of this "tooth saga" is that the Paluxy creationists committed the very mistake that many creationists attribute to scientists supporting "Nebraska Man" in the 1920's -- creating a hominid from a single tooth. This time instead of it being a pig's tooth (two, actually) it was that of a fish. Scientists in the 1920's quickly corrected their mistake when they looked for corroborative evidence. Paluxy creationists did not seek such corroboration and only corrected their mistake when cornered by the evidence -- a correction done much more belatedly than the evidence warranted. From now on, creationists everywhere should be very careful in using the "Nebraska Man" story -- the "Glen Rose Man" story makes it backfire on them!



## Background Reading and References

- Baugh, Carl E. 1987. *Dinosaur, Evidence that Dinosaurs and Men Walked Together*, Orange, CA: Promise Publishing Inc.
- Creation Evidences from the Paluxy* Fall, 1987. Creation Evidences Museum, P.O. Box 309, Glen Rose, TX 76043.
- Godfrey, Laurie R. and John R. Cole 1986. "Blunder in their Footsteps", *Natural History* August, pp. 4-12.
- Hastings, Ronnie J. 1988. "The Rise and Fall of the Paluxy Mantracks", *Perspectives on Science and Christian Faith*, American Scientific Affiliation, 40(3):144-155.
- 1987. "'Glen Rose Man' -- Creationists' 'Nebraska Man'?", *Creation/Evolution Newsletter* 7(4):15-16.
- 1987. "Creationists' Tooth Claims Evolve into a New 'Fish Story'", *C/E Newsletter* 7(5):18-20.
- 1987. "New Observations on Paluxy Tracks Confirm Their Dinosaurian Origin", *Journal of Geological Education* 35(1):4-15.
- 1987. "Tracking Those Incredible Creationists -- The Trail Goes On", *Creation/Evolution* Issue XXI, 7(2):30-42.
- 1986. "Tracking Those Incredible Creationists -- The Trail Continues", *Creation/Evolution* Issue XVII, 6(1):19-27.
- 1985. "Tracking Those Incredible Creationists", *Creation/Evolution* Issue XV, 5(1):5-15. (Special Issue: Paluxy River Mystery -- Solved)
- Kuban, Glen J., 1989. *The Texas "Mantrack" Controversy*, Glen Kuban, P.O. Box 663, Brunswick, OH, 44212 (in press).
- 1986. "The Taylor Site 'Mantracks' and Review of ICR Impact article 151", *Origins Research* 9(1):1,7-13.
- 1986. "A Summary of the Taylor Site Evidence", *Creation/Evolution* issue XVII, 6(1):10-18.

## Newspaper Exposes Textbook Selection Process

Reprinted from *BACC Science!* 2(1), the newsletter of the Bay Area Committee of Correspondence for Science

A series of articles in the San Francisco Chronicle in late April, 1989 exposed a number of abuses in the California state textbook adoption process. The articles, by staffers Angie Cannon and Michael Taylor, described how books are chosen for grades K-8 in California, and how textbook choosers at many levels are wined, dined, entertained, and presented with gifts by publishers eager to have their books selected. Can we be assured that the best books are chosen with such practices going on?

As discussed in the articles, California's textbook adoption system has two levels. First, the state Board of Education, through a lengthy process, lists books which may be bought with state money for science, history, mathematics, and other courses. The lucky textbook publishers listed thus acquire a "hunting license" to sell their wares in California. Next, the local districts select the books they will use from among the 6-10 approved books on the State list. Abuses of the system may occur at both levels.

Board of Education member David T. Romero was singled out as having a particularly chummy relationship with the regional manager of Holt, Rinehart and Winston, whose books have been on the state lists for the last 7 years. Romero has allegedly given the Holt official "insider information."

But perhaps more severe abuses occur at the district level. The factor which seems to have the most influence on a district's

committee's choice of a particular text is the charm of the salesman, perhaps augmented by the free book bags, lunches, wine and cheese parties, theatre tickets, and even more extravagant entertaining. About 30 Vacaville teachers were guests of McGraw Hill at Oakland's fancy Claremont Resort hotel last summer. Textbook publisher Open

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*Guests of a textbook publisher spent two hours Saturday morning listening to authors and company officials discuss the publisher's math books, and the rest of the time cruising the harbor on a 45-foot yacht, playing golf and tennis, and dancing and dining at a posh restaurant.*

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Court hosted 30 educators in \$235 per night rooms at the Ritz-Carlton in Newport Beach for a weekend. Guests spent two hours Saturday morning listening to authors and company officials discuss the publisher's math books, and the rest of the time cruising the harbor on a 45-foot yacht, playing golf and tennis, and dancing and dining at a posh restaurant.

This particular "cost of doing business" is of course appended to the price of books we purchase in California -- and elsewhere.

Call your district and inquire if there is a policy regarding what perks an educator can accept from a publisher or publisher's representative. If there is a policy, please ask for a copy and send it to us. If we find some good ones, we will publish them and try to get them adopted more broadly. (Maybe a good policy would be to eliminate from consideration any publisher who provided any committee member with *any* item or service with monetary value!)



## Lewin Receives Two Science Writing Awards

Roger Lewin, deputy editor for "Research News" at *Science* magazine, recently received two science writing awards. (*Science* is the official weekly journal of the American Association for the Advancement of Science). He was named the winner of the first annual Lewis Thomas Award for Excellence in Communicating Life Sciences. In selecting Lewin for the first annual Lewis Thomas Award, the awards committee cited his writing as "elegant, sophisticated, and accessible to the general public." His most recent book, *Bones of Contention*, about controversies in human evolution, was chosen by the Committee for the Public Understanding of Science as the best science book for a general audience published in Great Britain in 1988. (Another book of Lewin's, *In the Age of Mankind*, published by the Smithsonian, is available at discount to NCSE members.)

Lewin was born in Great Britain, and holds a Ph.D. in biochemistry.

NCSE members will recall Lewin's many informative pieces written about the creation/evolution controversy, some of which have been reproduced in issues of the *Creation/Evolution Newsletter*. He writes frequently on evolutionary biology, and by doing so, has of course joined the ranks of fellow scientists who have been misquoted by creationists. His articles have often been used in college classes to help students understand new developments in evolutionary theory. We congratulate our friend, Roger Lewin!

## Why should the general public have a better understanding of science?

Isaac Asimov, quoted in *SIPIScope*, 17:21, 1989

As long as we live in a democracy that depends upon people's votes to choose our leaders, and as long as those votes can be affected by the kind of phoniness we saw in the recent election, the more of a mockery

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*In a society in which science misused can destroy us all and science used well is the only hope we have of solving our problems, we are constantly flirting with the utmost disaster when people know so little about science.*

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democracy becomes. And in a society in which science misused can destroy us all and science used well is the only hope we have of solving our problems, we are constantly flirting with the utmost disaster when people know so little about science. It means that people don't know enough to pressure their leaders in a sensible direction. We really can't hope for intelligent practices to save us from catastrophe when our leaders either know so little science themselves or are so little concerned about it that they don't try to educate the public, but rather go after the pocketbook causes. I'd hate to think that an important political leader in this country might ever have to choose between saving the earth from destruction and being re-elected. I think he'd go for re-election every time.

*Well, it is a theory, it is a scientific theory only, and it has in recent years been challenged in the world of science and is not yet believed in the scientific community to be as infallible as it once was believed. But if it was going to be taught in the schools, then I think that also the biblical theory of creation, which is not a theory but the biblical story of creation, should also be taught.*

--Ronald W. Reagan, 1980

## KEEPING TABS

### Shake-Up at The Bible-Science Association

Robert J. Schadewald

The Bible-Science Association (BSA), creationism's largest membership organization, underwent a major shake-up early this year. A faction of the BSA board had reportedly been unhappy with the administration for some time, and the dissidents finally mustered a majority in support of drastic change. On February 15, 1989, all BSA employees (perhaps half a dozen, full- and part-time) were fired, with the exception of Reverend Paul Bartz.

Among the casualties was Field Director Bill Overn, the man primarily responsible for convincing founder Reverend Walter Lang to move the organization from Caldwell, Idaho to Minneapolis about a decade ago. (Lang himself was frozen out of the operation a few years back, although he retained the title Director Emeritus and continued to serve on the board.) Overn's position as Field Director was officially half-time, but he seemed to work more than that, and he also made substantial financial contributions to BSA. An electrical engineer with additional training in physics, Overn was the only BSA staffer with a significant scientific background. He is understandably bitter about the way he was treated; this hardly resembled the retirement package he had been led to expect!

The survivor, Paul Bartz, retained his job as editor of the *Bible-Science Newsletter* (under the new title of Communications Director), relinquished the job of Executive Director, and took over as manager of the BSA bookstore. The *Bible-Science Newsletter* was also reshaped, and it is now being completely produced in-house on a desktop publishing system.

The new BSA Executive Director is Gregory A. Hull, a 29-year-old former pastor of an Evangelical Free Church. Reverend Hull has a B.A. in sociology and philosophy from St. Cloud State University and an M.A. in the philosophy of religion from Denver Theological Seminary. He is considered a protege of Russell Arndts, professor of chemistry at St. Cloud State University and former president of the Bible-Science Association.

As part of the BSA restructuring, Russ Arndts resigned the presidency, and Keith Hedges, a Twin Cities veterinarian, was elected to replace him. Hedges runs a large veterinary clinic, and he told me he was elected in part for his management skills. He intends to play a much more active role in the management of BSA than did former presidents. Hedges has ambitious plans for the Bible-Science Association. He wants to put the organization on a better financial footing through sound management practices. He hopes that eventually BSA will be able to expand its operations, hiring science writers to prepare curricula and other materials. He also wants to improve the quality of the *Bible-Science Newsletter*. In that, we wish him well. If he can reduce or eliminate the scientific incompetence, intellectual dishonesty, and strident hate-mongering that have earned it the sobriquet of "B.S. Newsletter," he will do everyone a favor.

### THOSE OTHER GUYS IN THE WATCHTOWER

Ernest C. Conrad

Reprinted from *BACC Science!* 2(1), the newsletter of the Bay Area Committee of Correspondence.

Anti-Evolutionists have two major Meccas in the United States - San Diego (with its Institute for Creation Research), and interestingly enough, Brooklyn, New



York, the home of the International Bible Students Association (i.e., the witnesses of Jehovah). Many articles have documented the out-of-context and deliberate misuse of scientific data as presented by the San Diego based group, but have overlooked what has been taking place on the doorsteps of urban and rural America.

As has been recently stated:

*In its most basic form, the out-of-context quotation consists of the use of an authority's words, ripped from their context, in order to support a point that those words, when taken in context, do not support and may even contradict. (Albert, 1985)*

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*It would take another biblical miracle to have the flood occur before the creation.*

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A striking example of the above processes used by the Jehovah Witnesses can be demonstrated by the following example. In their short, 190 page book, "Good News To Make You Happy," in an attempt to document the flood of Noah and to preserve biblical inerrancy, the following quotation appears:

*Science News, October 4, 1975: In almost every culture ... emerge strikingly similar tales of a great flood that swept away emerging civilizations and changed the face of the earth. New evidence gathered from sea floor cores ... confirms the existence of such a universal deluge.*

The next line was very carefully and deliberately omitted: "... and offers a tentative explanation."

The explanation of the flood as developed by paleoclimatologist Cesare Emiliani at the University of Miami is "...that during the tenth millennium B.C., the Laurentide ice sheet covering much of the Northern Hemisphere underwent a sudden surge, readvancing southward where

it quickly melted. The released water would have caused extensive inland flooding and raised the sea level perhaps some tenths of meters per year." The date established for this melt using Carbon-14 and scintillation counters was about 9600 B.C.

The conclusion (which, again, the Witnesses failed to note) states, "We postulate that ensuing flooding of the low-lying coastal areas, many of which were inhabited by man, gave rise to the deluge stories common to many traditions."

It is rather obvious that the Witness author used selective editing and "ripped from their context" that which would support his biblical science, contrary to the findings of Emiliani and his team at Miami.

There is another reason why the article was selectively cut into bits; the date of 9600 B.C. would be unacceptable to the men on the Watchtower because, based on Witness scholarship, creation took place in the year 4026 B.C. with the advent of Adam. It would take another biblical miracle and then some to have the flood occur *before* the creation. The flood, by the way, swept the earth in the year 2370 B.C., which is 830 years after Mena or Menes, the first historical king of Egypt who founded the first unbroken line of Egypt's thirty dynasties. (c. 3200 B.C.) The flood of Noah must have occurred over in the next county!

#### SOURCES:

Albert, Leon H. 1985, "Lucy Out of Context", *Skeptical Inquirer* IX (4):364

*Science News*, October 4, 1975, 108:214

*Good News To Make You Happy*: Watch Tower Bible and Tract Society of Pennsylvania, 1976, p.21

"In almost every culture...emerge strikingly similar tales of a great flood that swept away emerging civilizations and changed the face of the earth. New evidence gathered from sea floor cores...confirms the existence of such a universal deluge and offers a tentative explanation."



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***Some  
suggestions for  
debating ....***

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## Creationist Debating 101

Reviews of recent debates serve as a reminder of some of the pitfalls often encountered in debating creationists. Most NCSE members will never have to debate a creationist, but some may be called upon to uphold the evolution point of view in some public forum. This may be a radio talk show, an interview by a reporter for a newspaper or television, or a discussion or debate at a community event. We have some suggestions for how to handle creation/evolution issues in a tape recorded at our 1988 Annual Symposium by two of the best debaters for the good guys, Fred Edwards and Ken Miller. See the tape list if you are interested. Following are some points to consider.

Whether a formal debate or an informal talk show, it is important to remember that these exchanges are emotional, rather than purely academic, events. The rules are different from those of writing a scholarly paper. First and foremost, never debate unless there is some hope of reaching undecided people in the audience. One look at the creationist audience before which Vincent Sarich and Duane Gish debated on a recent NOVA show and it was clear that no converts were to be had. Those dignified-appearing gentlemen with the square-cut beards and black hats and the ladies in snoods were not likely to be impressed by Sarich's erudite comments on cytochrome c. It is at best a waste of time to act as a mere foil for the creation "scientist's" rallying of the troops. If the debate is going to be held on a college campus or municipal site, and a general audience is to be invited, there is a possibility to educate some people, at least about the flaws of "scientific" creationism.

Do not disdain "show biz." Debates are intended to *move* people; rely on facts and logic alone and you win the debate and lose the

audience. You're there to win the audience. At a minimum, an audible voice and lots of visuals are necessary; a lively speaking style, and the use of humor help immensely. If your CC is requested to provide a debater, note that expertise in the subject matter does not necessarily imply expertise in debating and public speaking. The best person for the debate may *not* be the most knowledgeable scientist, but the person with the quickest comebacks.

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Never assume an audience (or opponent!) understands the basic issues and principles of science -- but never talk down to them. Explain in simple English the essence of your argument. Audiences commonly want absolute certainty -- tough to do honestly with science, but a specialty of creationism. Try to at least supply simplicity.

Make clear two major points: gradual Darwinian evolution and special creation are not the only two possibilities, so disproving one does not prove the other; also, evolution is not the same as atheism. You should not tolerate terms like "evolutionism" or "belief in evolution". (Scientists don't "believe" in evolution any more than they "believe" in gravity.) And do not disparage religion. Remember: 95% of Americans are theists. If you give them a false choice between evolution and their religious beliefs, how many will choose evolution?

Finally, a word on strategy. Odd as it sounds, do not concentrate on defending evolution. Evolution doesn't need defending; it is a legitimate, accepted science.



Creationists attack evolution as their way of supporting creationism, as if disproving evolution would prove creation. It's the old, "If you're wrong, I'm right" logical fallacy. No matter how many specific creationist arguments you explain, there will always be another. You can explain why the dust on the moon argument is wrong, or Polonium halos, or the living-mollusk-that-was-radiocarbon-dated-and-found-to-be-3000-years-old arguments, but there is always some other plausible-sounding idea the creationists can throw at your audience. The unfortunate tendency of those without much scientific training is to say, "OK, that may be wrong, but how about *this* argument?" Like the little boy shoveling enthusiastically at the mountain of manure, there's a pony in there somewhere.

Do not be drawn into extended discussions of disagreement between various schools of evolutionary thought. Creationists misconstrue and misrepresent these controversies about *how* evolution took place and use them to "refute" the fact of evolution. While not misleading the audience that there are no disagreements about evolutionary theory, stress that there is great underlying agreement among scientists as to the *fact* of evolution. The disagreements are about mechanisms, and are difficult to summarize in 25 words or less, and do not lend themselves to "sound bites", which is what you need especially on radio or TV. Don't let them get away with it!

Evolution doesn't need defending. *Creationism* needs defending. Attack it. The best strategy is to take the offensive. The Annual Symposium tapes by Edwards and Miller show beautiful examples of this. If you need information on the creation/evolution controversy, remember your CC and NCSE are here to help you.

## ICR Claims Creation "Science" Lectures Given in Public Schools

According to the April issue of the ICR's *Acts & Facts*, Ken Ham (ICR's Australian-born new lecturer) had the "exciting opportunity" of speaking about creation "science" to over six-hundred public high school students - in their science classes. He spoke to thirty science classes in "four major public high schools in Illinois." Further details, such as dates or locations of the schools, were not given - the ICR knows as well as we do that religion should not be presented in public school science classes. And the religious nature of Mr. Ham's talks is not concealed in the article; it states that "local pastors will be following up with students."

Both Illinois liaisons, Al Martin and Ranse Traxler, as well as NCSE President John Cole, have written to the Illinois Interim State Superintendent of Education, alerting him to the problem.

Martin's letter read in part:

"The creationists frequently appeal to or intimidate local educators to allow the teaching of creation 'science' in their classrooms in the name of 'balanced treatment' or 'academic freedom' and school administrators and teachers sometimes yield to creationist demands in order to avoid confrontation....But the judicial history of the issue clearly indicates that teaching creation 'science' *does not* advance the secular purpose of 'academic freedom'. (The Supreme Court's *Edwards v Aguillard* decision)...said that the creationist's claim that the statute had a secular purpose was simply 'a sham.'...We need to take appropriate action to

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ensure the integrity and quality of science education in Illinois. To this end, I strongly urge the Illinois Department of Education to draft and publish an official policy statement which acknowledges the scientific nature of evolution, the religious nature of creation 'science' and the inappropriateness and illegality of teaching creation 'science' in public schools. The policy should strongly prohibit the teaching of pseudo-scientific

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religious dogma in public schools and provide appropriate punitive action against individuals who violate the policy and therefore, the First Amendment. A somewhat similar policy was recently drafted by the California Department of Education. The California policy states that 'evolution is the central organizing principle of biology...is a fact...and it is also a theory.' 'Evolution should be the starting point of any course in natural science'...and 'teachers must not be pressured by any social, community, parent or administrative influences to distort or suppress science or go beyond what they are professionally obligated to teach.'"

Encouraging the development of this policy, Cole stated:

"The best 'reaction' is probably *prevention* -- at least of future problems, by the development of effective procedures for schools to use when confronted with demands from the pressure groups that dilute or skirt supposedly controversial topics rather than meet them head-on. Insisting that the best science available be taught, not necessarily the most politically expedient variety, combined with mechanisms which encourage

parents and teachers to resolve conflicts via formal procedures rather than *ad hoc*, proves fairly effective in a number of states."

An official of the SBE wrote Martin that "neither state law nor policy in Illinois supports the teaching of creation science," but declined to proceed with a formal policy.

Vigilance is needed, so that this kind of sneak attack on the integrity of science doesn't happen again. Teachers, parents, and others closely involved with schools -- in all states -- should watch for announcements that Mr. Ham or other creation "scientists" are coming, to assure that their lectures are only conducted in the appropriate places -- which does not include the public school science classroom.

## Midwest Creation Fellowship Changes?

Wheaton, Illinois-based Midwest Creation Fellowship has changed directors and perhaps directions. John J. Fino, Jr. is now editor and publisher and John A. Dingness the new Coordinator. At least publicly, their summer *Newsletter* stresses church meetings and Christian schools and home education creationism training for children and others. It seems to go out of the way to stress non-public school venues and issues, unlike its more eclectic predecessor. If this truly represents a retreat from pressuring public schools to include "scientific" creationism, it is significant.

MCF attacks the supposed bias, dogmatism, and violation of civil rights by evolutionists, which seems to be a growing national antievolutionist tactic which could have legal ramifications as time passes.

Their free *Newsletter* is available from their new address: MCF, P.O. Box 952, Wheaton, IL 60189.



## Non-Fundamentalist Anti-Evolution Literature

Anti-evolutionism has a broad base. NCSE members are aware of the young-earth, "scientific" creationists, but there are others as well. Some of them rely on typical young-earth creationist arguments, even though they are written by alleged "non-creationists." Hitching, Macbeth, and Denton are examples of this genre. Creationists have been especially fond of the Denton book as "evidence against evolution," and we are planning to do an extensive review of Denton in the near future. But less familiar anti-evolution sources also exist, including recently emerging "New Age" sources like Rifkin's *Algeny*. Another group to watch are, as Scott Faust puts it, "the evangelicals who focus on sophisticated re-workings of the design argument, critiques of natural selection and such, generally

ignoring 'flood geology,' and 'age of the earth.'"

"Straight" creationist literature can be confusing enough to non-scientists, but this non-young earth literature is even more confusing because it is less blatantly unscientific. Faust states, "Creationists can garner victories from local and state school boards simply by causing confusion, even when they cannot convince. The non-fundamentalist anti-evolution literature can be useful in this regard. (The Gablers even attempt to play different schools of thought within mainstream evolutionary theory -- cladistics, punctuated equilibrium, etc. -- off against each other to create useful confusion.)"

Scott Faust has sent a list of books he calls "Other than Familiar Fundamentalist Anti-evolution Literature" (OFFAL) which he has been kind enough to share with us.

Thanks, Scott.

## "OFFAL"

- Augros, Robert & George Stanciu. *The New Biology: Discovering The Wisdom in Nature*. New Science Library (Shambhala), 1988.
- Denton, Michael. *Evolution: A Theory in Crisis*. Adler & Adler, 1985.
- Fix, W. R. *The Bone Peddlers: Selling Evolution*. Macmillan, 1984.
- Goodman, Jeffrey. *American Genesis: The American Indian and the Origins of Modern Man*. Putnam, 1981.
- The Genesis Mystery: A Startling New Theory of Outside Intervention in the Development of Modern Man*. Times Books, 1983.
- Hitching, Francis. *The Neck of the Giraffe: Where Darwin Went Wrong*. Ticknor & Fields, 1982.
- Holbrook, David. *Evolution and the Humanities*. Gower, 1987.
- Hoyle, Fred & C. Wickramasinghe. *Evolution from Space: A Theory of Cosmic Creationism*. S & S Publishers, 1984.
- Koestler, Arthur. *The Case of the Midwife Toad*. Random House, 1971.
- Laszlo, Ervin. *Evolution: The Grand Synthesis*. New Science Library (Shambhala), 19??.
- Macbeth, Norman. *Darwin Re-tried*. Garnstone Press, 1974.
- Pitman, Michael. *Adam and Evolution*. Rider, 1984.
- Rifkin, Jeremy. *Algeny*. Viking, 1981.
- Singh, Swarupa Damodara. *Life Comes From Life: Morning Walks with His Divine Grace A.C. Bhaktivedanta Swami Prabhupada*. Bhaktivedanta Book Trust, 1979.
- Taylor, Gordon R. *The Great Evolution Mystery*. Harper & Row, 1983.
- Wilber, Ken. *Up From Eden: A Transpersonal View of Human Evolution*. Shambhala, 1981.

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