



CHARLES DARWIN

"On the ordinary view of each species having been independently created, we gain no scientific explanation...."

## Conservative Critics See Opportunity to Reverse Policies

# California Education Chief Indicted, Says Antievolutionists to Blame

John Cole

**I**N MARCH, 1992, Bill Honig, California Superintendent of Public Instruction, was charged by California Attorney General Dan Lungren with four counts of "conflict of interest" violation. The case was initiated by several Honig critics, including opponents on the State Board of Education who have opposed his education reforms.

"Politics at its worst," said Honig at a news conference March 26th reported in the San Francisco *Chronicle*. "I will be vindicated because I have done nothing wrong." He accused state attorney general Dan Lungren of witch-hunting. "It's a shoddy case, a phony case."

In February, Lungren convened a grand jury to bring these charges soon after a January agreement with the Institute for Creation Research against Honig. Lungren had declined to defend Honig on the grounds that he lacked time to do so.

Charges against Honig focus on his role, if any, in assignment of four state employees to work with Quality Education Programs, a private consulting operation directed by his wife, Nancy Honig. QEP rented space in the Honigs' San Francisco home and received non-state grants to develop curriculum projects. Four state employees on leave were consultants to QEP. Honig maintains that the

Honig, continued on p. 10

## Asimov Dies at 72

John Cole

ISAAC ASIMOV has died, not unexpectedly but too young, after a brief but severe illness. He was one of our leading Supporters, not only because he was alphabetized first. His career as an ardent populizer of science will never be duplicated—unless by the robots his science fiction work described (he invented the term "robotics," although the term "robot" was coined by Czech writer Karl Čapek). Unlike most writers he kept producing more and getting better as he aged.

You've probably seen the stats: He wrote nearly 500 books. Maybe you thought this was some corporation or something—that the books and articles and stories were produced by a stable of hacks like Gothic romances. But no, he really did write endlessly. He really did have the dedication

Asimov, continued on p. 11

## Contents

Editor's Desk . . . . .	2
Letters . . . . .	4
News . . . . .	6
Resources . . . . .	14
Tracking Those Incredible	
Creationists . . . . .	16
Keeping Tabs . . . . .	18
NCSE News . . . . .	21
CC Update . . . . .	23



# Editor's Desk

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California isn't the center of the universe, but it is often on the cutting edge of the creation-evolution argument. California policy decisions affect teachers nationwide and, often, world-wide. This issue of *Reports* describes the latest confrontations there which will reverberate elsewhere.

NCSE does not take stands on political issues or legal matters, but I do think it fair to say that something smells in the current prosecution of Bill Honig reported in this issue.

Another *Creation/Evolution* Journal will be published soon after this issue of *Reports*, so if you have comments for *C/E*, please let me know very soon. Suffice for the moment to say that much praise and flack has been heard as a result of Jim Lippard's article, "How Not to Argue with Creationists;" the next issue will probably include at least some of this. If deadlines are missed, this will be postponed until the Fall issue. I do not want to extend this or similar debates over multiple issues, however.

For the most part, I plan to publish reactions to or commentary on *C/E* articles in the journal rather than in these pages.

At the Board of Directors' meeting in February, I failed to mount an adequate negative campaign and was thus reappointed Editor. Other Board members accepted my proposal that *Reports* be made officially a quarterly publication—as I was already treating it, to be honest. *C/E* was made officially a semi-annual (or biannual?) with a spring and fall schedule somewhat independent of *Reports*. In other words, members will get four *Reports* per year and two journals. The fact that "Winter" straddles New Years means we may mess up and get an issue to you a little late, but I hope to improve on this!

As usual, I invite letters and articles, reviews, etc. Please do help—I do not know all this stuff on my own!

I'm pleased to report that I've received too many letters to publish them all for this issue. My apologies if yours was omitted, but be assured that it was read and its point(s) noted. Some published letters have to be edited for reasons of space but not content, I trust; this is also true of articles.

John Cole

Cartoons by Jeff Reid are copyrighted by him; his catalogue is available for \$1.00 from Card Attack, 328 W. 19th St., #3D, NYC 10011 (a new address). His satirical book, *Cat-Dependent No More!* is published by Fawcett-Columbine, not Ballantine, as reported in our last issue.



# More on the ICR-California Settlement

Thomas H. Jukes  
University of California  
Berkeley

**T**he Institute for Creation Research (ICR), in Santee, CA, has a graduate school program "designed to prepare graduates for productive careers . . . and also for significant service in the cause of creation." It offers M.S. degrees in Astro/Geophysics, Biology, Geology, and Science Education. In 1981, the State of California Office of Private Postsecondary Education (OPPE) "gave the approval rating" for these four M.S. programs. The ICR catalogue described at length the commitment of the faculty to "both scientific creationism and Biblical creationism." The latter states that the creation story of Genesis 1:1-2:3 "is factual, historical and perspicuous: thus all theories . . . which involve evolution in any form are false." The program of ICR is therefore inescapably religious. (Quotations above are from the ICR Graduate School Catalogue, 1982-1983.)

In 1987, ICR applied for reapproval by OPPE of its graduate M.S. programs. The application was made to the California State Department of Education (CDE). A site visit to ICR for consideration of this approval was made August 3-5, 1988, by a committee of five, two of whom were creationists. The committee made a lukewarm report, with criticisms of the teaching and the labs and questions about the academic program, but it voted 3-2 to recommend reapproval. On December 3, 1988, a member of the majority, Dr. R. Kovach, changed his vote to disapproval. On December 7, 1988, State Superintendent of Public Instruction Bill Honig said that reapproval would be denied, and that "no one is stopping the ICR from granting degrees in religion or creation, but they are holding their people to have science degrees, which they don't. The vast bulk of what they learn is not science" (Blakeslee, 1988).

Following this, corrective measures were discussed as an alternative to outright disapproval, and Honig decided that it would be necessary to appoint another on-site review committee. ICR agreed this should take place in summer 1989. This second group was chaired by Richard Dickerson and also included Everett Olson, Christopher Wills, Lawrence Lerner, and a member selected by the ICR, Leroy Eimers. The group submitted its 48-page report in January 1990. It was critical of the quality of education at ICR, not of creationism, and the committee recommended denial of reapproval. Eimers signed the report but was not in agreement with its recommendation.

The report was widely publicized; a report in *Nature* (Buderi, 1990) also noted that the denial of approval would be appealed.

ICR brought a lawsuit against Honig and two of his assistants. On January 31, 1992, a judgement was made by a U.S. District Court, declaring agreement by the ICR and the State to eight points. Briefly summarized, these were "that defendants acknowledge" the following:

- a) that the 1989 Visiting Committee report [the Dickerson report] should be rescinded and withdrawn by "physical removal or notation;"
- b) the 1988 favorable Visiting Committee report (prior to the change in recommendation by Kovach) should be the last official document in the file;
- c) a private postsecondary educational institution (PPEI) may teach anything it wants "except as provided by statute . . .";
- d) Honig must abstain from voting on ICR's application until his term of office expires in 1995;
- e) ICR may specify statements of belief and purpose that comply with a national association [the creationist Transnational Association of Christian Schools (TRACS), led by ICR's Henry Morris];
- f) ICR has First Amendment rights of free speech, religious freedom, and "academic freedom" [the last is not mentioned in the Constitution, however];
- g) PPEIs may teach the creation model as being correct provided that instruction also includes evolution [see below];

ICR, continued on p. 11

~  
"all  
theories . . .  
which  
involve  
evolution  
in any  
form are  
false."  
~



# Letters

Dear Editor:

I see [11(4):8] that the only planets that are not named for a god or goddess are the Earth and the Moon. I would expect this from the editor of *The Old Farmer's Almanac* but I like not to find it from a university professor or the International Astronomical Union.

The Greek name for our planet is *Gaea*, sometimes transliterated *Gaia*. Her name in Roman mythology is *Terra*. She is the Earth goddess whose children were Titans. The French name for Earth is *la terre* (feminine), and the Spanish is *la tierra* (feminine). Both the French and Spanish names . . . come from the Latin and retain the gender. The German name is *die Erde* (feminine) [a goddess]. . . I suspect that the English word Earth is etymologically related to the German word *Erde*.

May I recall a couplet from Joyce Kilmer's poem *Trees*?

A tree whose hungry mouth is prest  
Against the Earth's sweet flowing breast!

Clearly the planet on which we live is named after a goddess, even in English.

The same is true of the Moon. The Greeks identified the Moon with the goddess Artemis. In Roman mythology the moon is associated with the goddess Diana, sometimes called Cynthia, the goddess of the moon and the hunt. In Latin, *Luna* is the Roman goddess of the Moon. The French name for Moon is *la lune*. The Spanish is *la luna*. Both names obviously come from the Latin.

The ignorance of language, including English but especially languages other than English, is typical of the Politically Correct intelligentsia who pullulate on American campuses today. Multiculturalism is their buzz-word but they have little or no learning. They flock like starlings from one in-thing to another. The most important place to be is in the center of the flock. In that position one cannot be accused of having original thoughts.

I am reminded of Alexander Pope's "A Little Learning."

A little learning is a dangerous thing;  
Drink deep, or taste not the Pierian spring:  
There shallow draughts intoxicate the brain,  
And drinking largely sobers us again. . .

Of course I realize that Alexander Pope, 1688–1744, is a dead white European male and therefore . . . to be ignored.

Someone has said: "The world needs a more intelligent intelligentsia."

Now for the last paragraph on that [article]. Why must the women whose names are to be used on Venus be "worthy"? Those who know their mythology are aware that Venus was a bit of a whore. Venereal diseases are named after her. Therefore, why not include Rahab (*Joshua* 6:17), Wallis Warfield Simpson, Madame Pompadour and others?

Your exposure of creationism is most praiseworthy. Keep the light on. Cockroaches don't like it.

Hubert P. Yockey  
Bel Air, MD

*Ed: Sorry! I should have credited my source (and thought about the details!); it was a news item in Science. I'll put on a record of Das Lied von die Erde and keep the light on.*

As always, I enjoyed the latest issue of *NCSE Reports*. . . The article about *The Old Farmer's Almanac* surprised me [for most of the reasons noted above—Ed.].

Another computer network with evolution/creation discussions is the Commodore-specific QuantumLink. The menu path News and Information→Express Yourself!→Theological Debate Board lands you in a message board where evolution comes up often. Another path is Just for Fun→The Interchange→Religious Realms/Philosophical Viewpoint. I owe a huge debt to *Creation/Evolution* and *NCSE Reports* for counterarguments and timely information to quickly and thoroughly refute creationist claims, and several times I've noted NCSE's address (print-outs of most of these exchanges has made a 3.5 cm thick notebook!).

Keep up the good work.

Bert Watkins  
Shreveport, LA

I hope that the proofreading of *NCSE Reports* will be improved.

On p. 17 [9(4)], I fail to see what is scientific about the concept of "the age of the universe." To me, it implies that the universe began at some time, and that therefore there was a time when it did not exist. What term is used for the space and matter/energy that existed before "the beginning of the universe," as the use of those quoted words implies? The concept of "an even older universe" also seems unscientific, to



# Letters

me, for the same reason. The concept of an expanding universe implies that there is an unnamed "space" beyond it, into which it could "expand." What is that space, if it is not part of the universe? Isn't all space included in the universe, by definition? What books answer these questions? Nearly 70 years ago I was taught that matter/energy cannot be created or destroyed, that nature abhors a vacuum, that in time there is always minus one and plus one, and that in space there is always plus one. Apparently those concepts are no longer held to be valid by science writers, but they don't explain what is wrong with them, and how those concepts were proved to be wrong, by whom, and how.

M.K.Stone  
Philadelphia, PA

*Ed: In the words of J.B.S. Haldane, "the universe is not only queerer than we suppose, but queerer than we can suppose." I hope I can recruit a lucid article for C/E on cosmogenesis (origin of the cosmos). As a non-physicist, I'll just attempt a couple of notes here. First, Dalrymple's article reflects the consensus of scientists today in accepting the idea of a "Big Bang" origin of the universe which has expanded like a balloon from an initial "singularity" or infinitely small point of near-infinite mass; second, there's nothing outside the balloon, and since time is slowed by great mass, the concept of "before the bang" is very unclear speculation. These ideas come out of relativity theory and obser-*

*vations which have supported it, plus later physics and math. Some astrophysicists now propose that there is probably something outside the universe—such as other universes! A couple of good references, both supposedly "popular" but fairly heavy going: Stephen Weinberg's The First Three Minutes, and Stephen Hawking's A Brief History of Time. Both writers are scientists instrumental in developing modern cosmogenesis theory. Of course, the final verdict is not in.*

*In NCSE Reports 11(4): p.1. . . "The ICR is currently licensed to grant degrees by the state of California. . . ." Then, p. 5: ". . . ICR must still seek approval from the state of California to grant degrees." [Which do you mean?]*

Howard F. Young  
La Crosse, WI

*Ed: Good (terse!) question. The latter meant to explain that ICR is still subject to regulation and must have and continues to need approval, although the rules have been changed. Permission must be renewed in 1997.*

Scientists should demand of creationists answers to these questions: 1) What are the creation theories (models)? Name them. 2) What are the basic premises, the postulates, of each theory? 3) What are some examples of lines of reasoning in each theory—reasoning used a) for support of postu-

lates, b) for explanations of known facts, and c) for prediction of possible new facts? 4) What are the ranges applicability and the limitations, the boundaries, of each theory?

If answers to these questions were given, honest citizens, in the light of real science, might readily agree with Darwin: **"On the ordinary view of each species having been independently created, we gain no scientific explanation of any one of these facts [geologic succession, geographic distribution and mutual affinities and homologies]. We can only say that it has so pleased the Creator to command that the past and present inhabitants of the world should appear in a certain order and in certain areas; that He has impressed on them the most extraordinary resemblances, and has classed them in groups subordinate to groups. But by such statements we gain no new knowledge; we do not connect together facts and laws; we explain nothing."** (Darwin, *Variation of Plants and Animals Under Domestication*, Orange Judd, London, 1868, p. 20)

Ralph W. Lewis  
Michigan State University  
East Lansing, MI

*Ed: Too few read Darwin—evolutionists or opponents. I don't view his arguments as any "last word," but many of them are surprisingly fresh today.*

Your uncritical publication of Jonathan Marks' self-serving

account of Phillip Johnson's visit to Yale lowered your publication's credibility in my eyes. I have heard Johnson lecture and debate, and I respect his ability to field sincere questions on both the scientific and philosophical aspects of evolution. If he, perhaps wrongly, judged Mr. Marks as a heckler and hence recognized another questioner, that is certainly within his privilege as the speaker on the floor.

Marks' *ad hominem* caricature of Johnson as hawking his book for monetary reasons is ludicrous. Johnson has an endowed chair in the Berkeley Law School and clearly is involved in this debate for intellectual and religious reasons. I urge you to print an apology to Dr. Johnson. I urge your readers to read Johnson's book and see if he's the "mountebank" described by Marks.

J. R. Cogdell  
Austin, TX

*Ed: A book review is planned.*

[cc of letter sent to Mr. Cogdell]  
I wouldn't take this sort of thing [ie, Marks' critique] too seriously. The folks at NCSE seem to consider themselves to have a mission to protect Darwinism from criticism of any kind. Their style in dealing with dissenters is reminiscent of that employed by the Soviet press in the pre-Glasnost days: Cover them with ridicule and abuse and refuse to acknowledge that the ruling ideology is having any problems whatever. I am used to this treatment and have  
**Letters, continued on p. 9**



## Creationists No Longer Invited to Peoria Public Schools —but the *bad* news is . . .

Eugenie C. Scott

~  
“children  
should not  
be taught  
'as fact'  
that  
'dinosaurs  
were here  
millions of  
years ago,'  
Leman  
said.”  
~

From mid-1989 through 1991, NCSE reported on extensive creationist activity in central Illinois [Reports 9(3):p.21; 10(3):p.1; 10(4):p.6; 10(6):p.1; 11(1):p.1; 11(2):p.4]. The Institute for Creation Research had been invited to speak in Peoria, Morton and other Illinois public school science classes for up to twelve years, with little dissent. NCSE southern Illinois and Missouri Liaison Ransie Traxler and other NCSE members brought considerable publicity to this practice, resulting in widespread condemnation from both the press and members of the state education hierarchy. The question is, what is going on *now* in central Illinois?

According to a recent series of articles by *Peoria Journal Star* reporter Elaine Hopkins (4/12/92, p. A12), “Speakers on creation science have addressed science classes in the past. But teachers are not encouraged to invite them now, Associate Superintendent Melvin Hines wrote in a letter, after a 1990 inquiry from the National Center for Science Education. A book, ‘Scientific Creationism,’ once listed for teacher reference on the approved list of high school science textbooks, no longer appears on the current list.”

That ICR faculty members are no longer lecturing to students in science classes is the good news. Unfortunately, the four articles by Hopkins go on to discuss how students in several districts in central Illinois are systematically being denied the opportunity to learn evolution. Officials at several districts, including Metamora, East Peoria, and Germantown Hills, claimed students have “enough to learn” without having to learn evolution. In Germantown Hills, Doug Leman, Vice President of the school board, wrote a heavily-referenced, 38 page document on creationism “for the enlightenment of the teachers.”

Leman wrote that neither evolution nor creationism was scientific, and both were belief systems. “Implications of the theory of evolution trouble Leman. The world cannot have developed by chance, he said. ‘There has to be a master designer. Without that designer, there’s no absolute moral code, only situation ethics.’” Children can be taught both models when they are old enough to understand them, but

not at the elementary level. “Meanwhile, the children should not be taught ‘as fact’ that ‘dinosaurs were here millions of years ago,’ Leman said.”

As Hopkins reported, “Teachers at Germantown Hills got the message.” Although the textbook used in the district discusses evolution, the chapters are skipped, according to an unidentified teacher. “As a result, some children say the world is only 6,000 years old, and that the dinosaurs lived with Adam and Eve, the teacher said. Instead of supplying accurate dates, teachers tell the children dinosaurs lived ‘a long time ago,’ the teacher said.”

Teachers who do bother to teach evolution apparently “believe they need to ‘balance’ the scientific concepts of evolution with other ‘theories,’ namely the Bible’s story of seven days of creation.” An example is the Morton district.

During the spring of 1991, Morton was the center of controversy when the school district, dismayed over “too much evolution” in the textbooks, directed the staff to develop a curriculum in creationism to be taught alongside evolution (see Reports 11(1):p.1.) NCSE and others publicized this dictum, which directly defied the 1987 Supreme Court decision, *Edwards v Aguillard*. National newspapers such as *Education Week* carried the story.

What was taught in the fall? According to the *Journal Star* reporter, “Biology teachers spend one class period discussing all the theories. They include life sent to earth from outer space and religious stories, including the account in Genesis.” It appears as if the “creationism curriculum” was reduced from earlier promises. Morton, apparently, does not like being the center of controversy.

There are some bright spots, however. Pekin High School science department head (and NCSE member) Jill Schimmelpfennig told the reporter that evolution and only evolution is taught in high school biology classes there. Similarly, teachers at Sterling Middle school teach evolution “because it’s part of a chapter in the science book.” □



## Still More about Eve

Frank Sonleitner

Department of Zoology

University of Oklahoma, Norman, OK

The "African Mitochondrial Eve" hypothesis based on the analysis of mitochondrial DNA has raised a lot of controversy. Some paleontologists claim that it is contradicted by fossil evidence (see Thorne and Wolpoff, *Resources*). Now, technical comments published in the February 7th *Science* criticize the statistical procedures used by the original researchers, and Mark Stoneking, one of the authors of the critique, was coauthor of the original "Eve" articles.

"Maximum parsimony" phylogenetic trees were generated from data—family trees traced back to a common female ancestor assuming a minimum number of mutations. Such a path is argued to be the most likely one followed by human evolution.

Alan Templeton of Washington University, with others, has now reanalyzed the original data using the original computer program. Depending on the nature of the data, the program can generate more than one, sometimes a great many, different yet equally parsimonious trees. Which subset of trees is actually generated also depends on the sequence in which the data are entered into the computer program. When more exhaustive computer runs were used, critics found many trees slightly more par-

simonious than that presented originally, and they found that the data do not necessarily require an African origin.

This does not mean that an African origin of modern humanity is ruled out, just that the mtDNA data have other possible interpretations. Some outspoken critics of the African Eve hypothesis applaud the new findings, while supporters point out that there is independent evidence to support it still, including fossils. They also note that the African gene pool is the most diverse on earth—genetic evidence which has long pointed to African origins.

Creationists may gleefully claim this debate shows evolutionists don't know what they are doing. However, it illustrates the opposite—that science is (or tries to be) self-correcting. If there are weak points in an approach, scientists will find them—and sometimes the original proponents such as Stoneking find the flaws.

Some references for further information:

Barinaga M. 1992. "African Eve" Backers Beat a Retreat. *Science* 255: 686–687, 7 Feb.

Brown, P. 1992. African Eve Theory Takes a Step Back. *New Scientist* 133: 26, 15 Feb.

Gee, H. 1992. Statistical Cloud over African Eden. *Nature* 355: 583, 13 Feb.

*Science News*. 1992. African Eve Gets Lost in the 'Trees.' 141(8): 123, 22 Feb.

Templeton, A.R., et al. 1992. Human Origins and Analysis of Mitochondrial DNA Sequences. *Science* 255: 737–739 (See *Resources*).

Thorne, A. and M. Wolpoff. 1992. The Multiple Origins of the Genus *Homo*. *Scientific American* 266(4): 76–83. (see *Resources*).

Vigilant, L., et al. 1991. African Populations and the Evolution of Human Mitochondrial DNA. *Science* 253: 1503–1507.

Wilson, A., and R. Cann. 1992. The Recent African Genesis of Humans. *Scientific American* 266(4): 66–73. (See *Resources*) □

## Clinton Not Governor When Arkansas Law Passed

Eugenie C. Scott

We have received several requests concerning whether Arkansas Governor Bill Clinton (a Democratic Presidential contender) was the Arkansas governor who signed the notorious "equal time" creationist bill in 1981. This bill later became the basis for the Federal District Court lawsuit, *McLean v Arkansas*.

He was not.

Clinton was governor from 1979–1981, and was defeated by Frank White, who signed Arkansas law 590. White was subsequently defeated by Bill Clinton in 1983, and Clinton has held the governor's seat ever since.

mtDNA =  
mitochondrial  
DNA: genetic  
material out-  
side the cell's  
nucleus.

**WHO LOVES INSECTS? ORKIN!** If you're the Smithsonian, and your budget is being cut, and you need help with a new insect exhibit, who do you call? Orkin Pesticide Co. ("We destroy them all"), that's who. *Science* reports that the Smithsonian has received \$500,000 from the company and that the newly named O. Orkin Insect Zoo will re-open in September 1993. An Orkin spokesperson said, with probably unintended double meaning, "We share the philosophy that insects are a vital part of nature." No one at the company said, "Insects are my life."



## Berkeley Law Prof Opposes Non-religious Nature of Science

Mary Lou Mendum  
UC Davis, Davis, CA

Johnson vigorously argued against the non-religious nature of the scientific method itself.

I read with interest the account of Phillip Johnson's Yale lecture [Reports 11(4)]. I had the opportunity to see Johnson in action a month ago when he came to UC Davis to debate with Berkeley Professor Vincent Sarich. The debate was sponsored by the Truth Seekers, a student Christian apologetics club which had previously sponsored talks by Duane Gish of the Institute for Creation Research.

The audience was largely attentive, with a majority of fundamentalists, but also a good smattering of scientifically literate students. Unlike other creationists I have heard, Johnson was honest enough to admit that he was advocating the addition of a supernatural, untestable hypothesis to account for the origin of species. This allowed Sarich to steer the debate away from creationist pseudoscience towards a more productive discussion on the nature and limitations of science as a method of knowing. This tactic was so effective that the creationists in the audience were very much on the defensive during the question session, and no pro-creationist letters appeared in the student newspaper in the following weeks.

For the benefit of NCSE members wishing to debate Johnson or attend his debates, here are some of the highlights:

1. In his introductory speech, Sarich carefully explained why supernatural, untestable hypotheses are excluded from science. Then, during the cross examination, he asked Johnson whether evolution was the best explanation for the current abundance and distribution of species *if*, for the sake of argument, one limited oneself to natural forces. There was an audible wince from creationists in the audience when Johnson readily admitted that it was.
2. Sarich handled questions from two creationists very effectively by refusing to accept their fundamentalist world view. One wanted to know how an evolved human race could come up with absolute moral principles instead of relative ones

like animals have. When challenged to name one such absolute moral principle, he offered, "Thou shalt not kill." Sarich added, "Except . . .", and the matter was quickly dropped. The other creationist wanted to know how Sarich's evolutionary perspective could account for the increasing moral decay of modern society, probably as a lead-in to linking the Second Law of Thermodynamics with the Fall of Adam and Eve. Sarich replied that given the recent downfall of many repressive communist governments, he felt that moral standards of the world were improving. In both cases, the creationists were unable to pursue their line of questioning, once their philosophical framework had been successfully challenged, and Sarich didn't have to try condensing a semester of introductory theology or thermodynamics into one minute or less.

3. One issue which Sarich did not adequately address was Johnson's statement, made three times during the evening, that one of the major reasons why he rejects evolution is that artificial breeding programs have not produced new species. This, according to Johnson, invalidates the frequently made comparisons between artificial breed development and speciation. If Sarich had been ready with a few examples of human-developed species (maize, tobacco, peppermint, grape, triticale, etc.), Johnson would have been forced to either retract his main stated objection to evolution, admit that he is not basing his beliefs on scientific evidence, or both.

Unlike other creationists I have seen, Johnson actually listened and responded to the points raised by his opponent, instead of just giving a set speech. He also avoided much of the usual creationist misquotation and rewriting of scientific laws (at least in his speech; I haven't read his book). Instead, he vigorously argued against the non-religious nature of the scientific method itself. This did not endear him to creationists in the audience, many of whom were all too aware that teaching religion in schools is unconstitutional. However, it does raise the hope that scientists who agree to debate Johnson might be able to use the opportunity to educate non-creationists in their audiences to the nature of science instead of having to concentrate on refuting a smokescreen of misinformation. □



## Improvement in Science and Math Ed Since *A Nation at Risk*?

"Yes, but" say state school chiefs

In March the Council of Chief State School Officers released a study analyzing trends in student course enrollments, supply of qualified teachers, and student achievement since the 1983 report by the National Commission on Excellence in Education. The study finds some good news compared with 10 years ago, although the details reveal a lot of room for improvement.

The Council paper draws on data from four recent surveys and outlines national and state indicators on three key questions:

1. Are students receiving more instruction in science and math now than 10 years ago?
2. Has the supply of qualified teachers in science and math improved?
3. Are students learning more science and math?

There is some improvement in each area. High school course enrollments have risen significantly, although rates of increase are smaller for advanced courses. Scores on the NAEP science and mathematics assessments have increased, particularly for students at ages 9 and 17. However, the level of student proficiency is still too low. In math, US students score below the level expected for their age and grade level. And there is wide variation by state in course enrollments and student achievement.

No absolute shortage of teachers was found, although in many states fewer than a third of math teachers had college math majors; science teachers fared a bit better, but in most states much improvement in qualifications seems possible. Shortages are greater in schools with more poor or minority students.

The Council is a nationwide non-profit organization of the 57 public officials who head departments of elementary and secondary education in every state, the District of Columbia, the Department of Defense Dependents Schools, and the five extra-state jurisdictions. □

## Chimp Pharmacology

Chimps not only use tools, they dose themselves with effective herbal remedies, according to recent field researchers. A AAAS symposium on zoopharmacognosy (!) in February featured reports from Africa which maintained that chimps intentionally used specific plants for specific remedies (e.g., particular plant leaves effective against worm infestations).

This adds to growing awareness of chimpanzee culture and cultural differences from one area to another. Chimps in the wild are highly endangered, however. Some researchers hope that demonstrating that chimps are useful informants about medical uses of plants will inspire greater efforts to save the lives of our closest nonhuman relatives. Not driving chimps extinct should not be such a dollar-related issue, and the more we learn about them, the more amazing they become. □

## Letters *continued from p. 5*

learned to turn it to advantage. Intelligent and fair-minded people recognize that a science education establishment that meets criticism with tactics of this sort must not be confident of its case on the merits of the argument.

Phillip E. Johnson  
School of Law, UCB  
Berkeley, CA

... [T]hat the state which so greedily taxes me, a retired person on a fixed and limited income, *dares* to use so much as one penny of any tax dollar of mine to aid or foster the existence of any pseudoscience—creationism, flat-earthism ... or otherwise, [enrages me]!

*Who*—what specific person in Sacramento, authorized that any check comprised of California taxpayers' money in the amount of \$225,000 be sent to cover expenses of the ICR (legal or otherwise), and *when* was any such check sent???

George James  
Crescent City, CA

*ED: Articles in this issue by Jukes and Cole should partially answer your questions about who did what when.*

in many  
states fewer  
than a third  
of math  
teachers  
had college  
math majors



## Honig *continued from p. 1*

employees were not on state payroll, that funding came from Washington, not California, and that his wife's work was independent of his office. QEP has been widely hailed for its successful efforts to improve schools and reduce dropout rates among disadvantaged students.

Honig said conservatives on the Board of Education wanted to reverse his policies promoting evolution education and higher standards for graduation. "There is obviously a political aspect to this," he said. "The right wing does not like what I have done as far as (the teaching of) evolution, as far as textbooks, as far as fighting for public dollars. . . . It's frightening how much power they do have in this state."

State School Board president Joe Stein supported the grand jury's work which he had helped bring about. According to the *Chronicle*, he said he shares the concerns of antievolutionist Christian groups while denying any vendetta. "My position is that evolution is theory, not fact," Stein said.

Board vice-president Gerti Thomas complained that Honig has set standards too high, forcing students to drop out of school. However, the dropout rate has declined during Honig's term in office. "[These high standards] are frightening many of the young people for fear of failure," says Thomas.

Lou Sheldon, a long-time Honig opponent and head of the "Traditional Values Coalition," hailed the Honig indictment but denied responsibility for it. "The important thing in our view is that Earth was not created by evolution but by God," he said.

Kathi Hudson, vice president of Citizens for Excellence in Education, said, "He wants to teach that evolution is a fact. You won't find any major scientist that will say it is a fact." She also argues that "sex education curriculums (*sic*) are encouraging children to have sex. . . ."

"He's done more for California education than any other state superintendent," said San Francisco superintendent Ramon Cortines.

"It's relatively rare to see a prosecution under this (law)," said San Francisco attorney Jerrold Ladar. "This is among the type of statutes that lend themselves to potential political misuse. . . ." According to Ladar, the issue is criminal intent.

"Usually, when an individual is accused of committing a crime . . . you have to ask, what is the motive?" noted another attorney. In this case, there seems to be no such motive.

"evolution is theory,  
not fact."

Joe Stein  
President,  
Cal. State School Board

Among those coming to Honig's defense were the president of the state school employees association and the executive director of the California Teachers Association. NCSE Executive Director Eugenie Scott, interviewed by *Science Magazine* (April 10), noted that, whatever the resolution of the case, it was bound to have a negative impact. Coming just before the summer when a

new round of textbook selections will take place, Honig and his office will have to divert a significant amount of time and energy to the legal case rather than to education issues.

Honig has been a long-time advocate of textbook improvement, an opponent of California's creationist lobby and the Institute for Creation Research, in particular. As reported on p. 3 and in our last issue, the ICR recently reached an out of court settlement against Honig's attempt to deny a state license to their graduate school and barred him from voting on future licensing procedures. If convicted, Honig would be dismissed from office and legally barred from ever holding public office again.

(From AP, *San Francisco Chronicle*, *San Francisco Examiner*, and other news reports.) □

~  
"The right  
wing does  
not like  
what I have  
done as far  
as (the  
teaching of)  
evolution"  
~



## ICR *continued from p. 3*

h) A private K-12 school is not within the jurisdiction of the California Department of Education "... except as provided by law."

Finally, the State of California agreed to pay ICR \$225,000.

Ruling a) is an audacious rewriting of history, since ICR agreed to the Dickerson Committee review. Ruling d) against Honig seems to conflict with his statutory responsibilities. Ruling g) revives the old campaign to teach creationism in schools by reviving the "equal time" argument.

It states that evolution will also be taught, but this is unlikely given the ICR's statement (above) that evolution is false.

The success of the creationist lawsuit was made possible by the unwillingness of California's Attorney General to contest it on behalf of the Department of Education.

### References:

Blakeslee, S. 1988. *The New York Times* p. A17, December 8.

Buderi, R. 1990. *Nature* 343: 501. □

## Asimov *continued from p. 1*

to face a typewriter at 6:00 A.M. and leave it at night with many pages written. Actually, he wrote at several typewriters, I think, moving from one to another if he ran out of what to write on a particular book or article. He was a late and hesitant convert to computers who continued to produce first drafts on a typewriter.

He joked about the sheer quantity of output and took pride in it. The numbers obscure the quality, however. He said his favorite book was *Murder at the ABA*, a detective novel featuring one Isaac Asimov as a best-selling author caught up in a novel. His "Robot" novels in the 1950s redefined both science fiction and automation science, but his most prominent work was the "Foundation Trilogy" (followed by a follow-up trilogy). He also wrote the first *Star Trek* movie.

Asimov was jealous of his writing time (which seemed like ALL the time), but he was also generous with his time on behalf of things he valued. He eschewed secretaries and answered his own phone and mail. He was happy to meet with people—as long as it was in Manhattan—to advance his pet causes such as science education, evolution, skepticism and humanism. Romancer of intergalactic travel, he hated flying—indeed, any traveling at all. He cheered on the conquest of space but felt that someone should stay home and write about it.

Several years ago I hosted a roundtable meeting sponsored by the American Humanist Association of which he was president. After a day-long session

in which Isaac talked about his hopes for the future, his views on physics, chemistry, poetry, biology, religion, cooking, politics, ecology, sex, and the experience of being an immigrant Russian Jew, he left for home to get back to his writing. One participant ventured the opinion that he was a "genius." An observer hastened to note that he was *not* a "genius," although he was pretty sharp, because he had not made breakthroughs in his doctoral field of molecular biology.

This was a prejudice he faced continually and seemed to shrug off. He was appointed to a job at Boston University soon after World War II knowing nothing about biochemistry, he claimed, and then wrote a definitive textbook on the subject because he wanted to know what he was supposed to teach. This experience suggested to him that he had a knack for explaining things, and he capitalized on it in later years.

An immigrant from Russia at age 3, he earned a B.S. degree at Columbia University and then a Ph.D. A Columbia B.A. in those days was reserved mostly for non-Jews and others eligible for the Ivy League imprint (I got a WASPy B.A. there and know the history). He exhibited the serene view of a person who had won the argument, not a resentment of the academics who sometimes disdained his work. Perhaps he was affected—this isn't a psychohistory (a term he originated!), but I remember him as a chuckling, literally gleeful man who saw everything as fascinating—and wanted to show other people why it was and to change the world as best he could. □

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He cheered  
on the  
conquest of  
space but  
felt that  
someone  
should stay  
home and  
write about  
it.  
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## B o o k s

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# Resources

This section briefly notes publications of interest without necessarily endorsing or criticizing them. Where indicated, copies are available from the NCSE Resource Center for nominal charges.

Aiello, Leslie, and Christopher Dean. 1990. *An Introduction to Human Evolutionary Anatomy*. San Diego: Academic Press. 596 pp. \$49.95 pb. Technical. Good reviews. Fat. Pricey.

Bengtson, S. 1991. Oddballs from the Cambrian Start to Get Even. *Nature* 351: 184-185. New views of *Hallucigenia*, early animals which are as weird as the name implies.

Bjorklund, Eugene C. 1991. Evolution and Creationism in the Public School Curriculum: The Academic Freedom Issue. *Education Law Reporter* XXX. Discusses Webster case and legal issues. Available for SASE + \$.50 from NCSE.

Bowlby, J. 1991. *Charles Darwin: A New Life*. NY: W.W. Norton. xiv+511 pp. \$24.95

Bowler, P.J. 1990. *Charles Darwin: The Man and His Influence*. Oxford and Cambridge, MA: Basil Blackwell. xii+250 pp. \$21.95

Brewster, Rudi. 1992. Judgement Granting Declaratory Judgement by Stipulation. The *ICR v Bill Honig* decision. SASE + \$.50 from NCSE.

Day, Lucille. 1992. Redefining the Tree of Life. *Mosaic* 22(4): 46-56. Latest competing ideas about the origin of life and the evolution of life's major categories—treats the 5-kingdom theory as an artifact of the 1960's—a good beginning. Written for the public but fairly technical.

Desmond, A. 1989. *The Politics of Evolution: Morphology, Medicine, and Reform in Radical London*. Chicago: University of Chicago Press. x+503 pp.

\$34.95. "Please read this book," writes reviewer Gareth Nelson. "What you learn will illuminate the present." 19th century London politics had a lot of parallels with today's politics in the creation-evolution debate.

Desmond, A. and J. Moore. 1991. *Darwin*. NY: Warner. 832 pp. \$35.00. "Remarkable," says reviewer Gareth Nelson, who recommends it as a landmark book which "leaves the myths behind."

Foner, Eric. 1992. The Education of Richard Hofstadter. *The Nation* 254: 597-603 (4 May). Excellent essay about the author of *Social Darwinism in American Thought*, *Anti-intellectualism in American Life*, etc. and their place in social history.

Gibbons, Ann. 1992. Sorting the Hominid Bonepile. *Science* 256: 176-177. Newsreport on a meeting at the American Museum of Natural History, "Apes or Ancestors?" which tried to

sort out hominid-hominoid evolution.

Gribbin, J. 1992. Quasar Red Shifts under the Lens. *New Scientist* 133: 23, 8 Feb. Discussion of new info concluding that quasars are indeed as far away as thought—and thus billions of years old.

Hambrey, M. 1992. Secrets of a Tropical Ice Age. *New Scientist* 133: 42-49, 1 Feb. Summaries of evidence for Precambrian ice ages.

Hillis, David M., J.J. Bull, M.E. White, M.R. Badgett, and I. K. Molinoux. 1992. Experimental Phylogenetics: Generation of a Known Phylogeny. *Science* 255: 589-592. Dramatic experiment introduced a mutagen which proceeded unguided to produce 5 different phylogenies or "histories" which were duplicates of known phylogenies. Available from NCSE for SASE + \$.50.

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# Resources

- Johnson, Phillip. 1992. Response to Jukes. *Journal of Molecular Evolution* 34: 93-94. Nested hierarchies exist but evolution doesn't? SASE + \$1.50 for this & 2 Jukes & 1 Mims articles below.
- Jukes, Thomas H. 1991. Creationism vs. *Scientific American*. *Journal of Molecular Evolution* 33:1-2. Critique of F. Mims' complaint that a magazine refused to hire him because of his religion. (See Johnson above)
- Jukes, Thomas H. 1991. The Persistent Conflict. *Journal of Molecular Evolution* 33: 205-206. Critique of Phillip Johnson's legalistic attack on evolution. (See Johnson above)
- Lewin, R. 1992. Earth's Field Flips Flippin' Fast. *New Scientist* 133: 26, 25 Jan. Oregon lava flows reveal rapid magnetic field reversals—bad news for creationists such as Thomas Barnes who deny reversals occur, but good news, of sorts, for some others willing to accept them and who want them rapid.
- Mayr, Ernst. 1991. *One Long Argument: Charles Darwin and the Genesis of Modern Evolutionary Thought*. Cambridge: Harvard University Press. xv + 195 pp. \$19.95. (Avail. from NCSE at 20% discount—See centerfold)
- McCord, Robert S. 1992. 101-Year-Old-Woman not Pregnant. *Daily Hampshire Gazette*, Northampton, MA 12 February. How supermarket tabloids (try to) get away with it, by a real newspaper editor who was an expert witness in a lawsuit against the *Sun*. SASE + \$0.50 from NCSE.
- McGowan, Christopher. 1991. *Dinosaurs, Spitfires and Sea Dragons*. Cambridge: Harvard University Press. Good popular introduction to dinosaurs, ichthyosaurs and pteranodons. Reviewed in next C/E.
- Margulis, Lynn, and D. Sagan. 1991. *Mystery Dance: On the Evolution of Human Sexuality*. 224 pp. QP Book Club \$9.95; Publ. ed. \$20, pb. Controversial sociobiology.
- Menendez, A.J., and Edd Doerr. 1991. *Religion and Public Education; Common Sense and the Law*. Long Beach, CA: Centerline Press. 112 pp, \$12.95. Pb. One 10 pp chapter is "Creationism vs. Evolution;" topics include teaching about religion and values. A publication of Americans for Religious Liberty.
- Mims, Forrest. 1992. A Response to Thomas H. Jukes. *Journal of Molecular Evolution* 34: 1-2. Followed by a brief note from Jukes. (See Johnson above)
- Nielson, R.H. 1992. The Oldest Ice in the World. *New Scientist* 133: 34-38, 29 Feb. Greenland Ice Core Project will soon hit bedrock, completing a continuous core climate record extending back 300,000-600,000 years—by far the oldest ice core ever.
- Norell, M.A., and M.I. Novacek. 1992. The Fossil Record and Evolution: Comparing Cladistic and Paleontologic Evidence for Vertebrate History. *Science* 255: 1690-1691. Predictions about evolution are tested, and it works.
- Parks, William S. 1992. An Open Letter to the *Journal Creation/Evolution*. *Creation Research Society Quarterly* 28: 177-178, March. Yet more on the old Walter Brown-Jim Lip-pard debate.
- Sereno, P.C. and R. Chenggang. 1992. Early Evolution of Avian Flight and Perching. *Science* 255: 845-848, 14 Feb. Sparrow-sized Chinese bird fossil intermediate in character between *Archaeopteryx* and modern birds. SASE + \$.50.
- Templeton, Alan R., S.B. Hedges, A. Kumar, K. Tamura and M. Stoneking. 1992. Human Origins and Analysis of Mitochondrial DNA Sequences. *Science* 255:737-739, 7 February. "Mitochondrial Eve" argument was statistically flawed. SASE + \$1.00 from NCSE.
- Thorne, Alan G., and Milford H. Wolpoff. 1992. The Multiregional Evolution of Humans. *Scientific American* 269(4): 76-83. The extreme "anti-molecular clock" argument from two of the leading proponents of the paper's title and of relying on features in "the bone alone." SASE + \$1.00 from NCSE.
- Wakefield, J. Richard. 1991. *Biological Evolution: An Overview of Mechanisms and Evidence*. OASIS Supplementary Monograph #1, 39pp. Second Edition. Illustrated, bound, with special reference to creationist arguments. Order from OASIS, 385 Main St., Beaverton, ON LOK 1A0 Canada. \$15

Resources, continued on p. 17



## Can Earth be Dated from Decay of its Magnetic Field?

G. Brent Dalrymple  
U.S. Geological Survey  
Menlo Park, CA

Despite overwhelming evidence to the contrary, "scientific" creationists insist that the Earth is young. One of the most frequently cited "proofs" of a young Earth is the decay of the Earth's magnetic field—an argument developed by Thomas G. Barnes (e.g., Barnes 1971, 1981, 1983), before his death Emeritus Professor of Physics, University of Texas, El Paso, and, for several years, Dean of the Graduate School at the Institute for Creation Research.

Barnes' argument is based on the observation that the strength of the Earth's dipole field (meaning 2 magnetic poles), called the dipole moment, has decreased about 6% since scientists began measuring the magnetic field and analyzing the data in the early 1800s. Barnes claims that the decrease in the dipole moment is due to freely decaying electrical currents circulating in the fluid iron-nickel core of the Earth. According to Barnes, these currents originated by unknown processes when the Earth was formed and have been decaying irreversibly and exponentially ever since with a half-life of 1400 years. He uses this half-life to calculate the value of Earth's dipole moment at various times in the past and finds that the strength of the field would have been impossibly large in 8000 B.C. Barnes concludes that the Earth must be less than 10,000 years old.

To people unfamiliar with the current state of research on the magnetic field, Barnes' argument may seem logical and straightforward. In arguing his case, however, he has apparently ignored or attempted to refute much of what scientists have learned in this century about the genesis and behavior of the Earth's field.

The primary objections to Barnes' thesis are three (Dalrymple 1983). First, there is no question that the dipole moment has been decreasing in recent years, but over long periods of time the change has not been exponential or even regular as Barnes assumes (Merrill and McElhinny, 1983; Bloxham and Gibbins, 1989). Studies of the magnetic field as recorded in dated rocks and pottery have shown that the dipole moment actually fluctuates over periods

of a few thousand years and that decreases in field intensity are eventually followed by increases. For example, the archaeomagnetic data show that the dipole field was about 20% weaker than the present field 6,500 years ago and about 45% stronger than the present field about 3000 years ago (McElhinny and Senanayake, 1982). Occasionally, the dipole field virtually disappears only to reappear with the north and south poles changing places. These *polarity reversals*, accompanied by a temporary decrease in the dipole moment, have been occurring every half-million years or so for millions of years. Thus, Barnes' exponential extrapolation back in time of the Earth's dipole moment based on only 150 years of data is obviously invalid; his conclusion that the Earth's magnetic field is only a few thousand years old is directly contradicted by voluminous data showing that the existence of the field is recorded in rocks dated as more than three billion years in age.

A second problem with Barnes' argument is that he has made the mistake of equating the dipole moment with the total field intensity and that, in turn, with the total field energy. To a first approximation, Earth's magnetic field has the same overall configuration as it would if the field were caused by a gigantic bar magnet, with north and south poles, in the core and aligned approximately along the Earth's rotational axes, i.e., the dipole field. The Earth's field, however, is much more complex than a simple dipole, and the concept of the Earth's dipole field is, in reality, only a mathematical device used by scientists to help them analyze the Earth's true magnetic field—it is the ideal and symmetrical dipole field that comes closest to fitting observed data. When the idealized dipole field is subtracted from the real field, the remainder is called the non-dipole field. Barnes completely neglects the non-dipole field. The same observatory measurements that show that the dipole moment has decreased since the early 1800s also show that this decrease has been almost completely balanced by an increase in the strength of the total observed field which has remained almost constant. In addition, Barnes neglects the probability that a significant proportion of the field energy may be contained in magnetic

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Barnes' exponential extrapolation back in time of the Earth's dipole moment based on only 150 years of data is obviously invalid.  
~



# Incredible Creationists

field components internal to the Earth's core and unobservable from its surface. So it is probably impossible to know exactly what the total field is doing from measurements made on or above the surface of the Earth.

Finally, scientists have concluded that the Earth's magnetic field is generated by the continuous fluid motion of material in its liquid iron-nickel core (Bloxham and Gibbins, 1989). This flow acts as a dynamo that generates electric currents that, in turn, induce the magnetic field. The dynamo theory has gained near-universal acceptance because it is the only proposed mechanism that can explain all the observed features of the Earth's magnetic field. In contrast, Barnes' hypothesis of a freely decaying field cannot explain the existence, configuration, movement, or changes in the nondipole field, the fluctuations in the dipole moment, the reversals in field polarity, or the documentation in the geologic record of the continued existence of the field for more than three billion years.

## References:

- Barnes, T.G. 1971. Decay of the Earth's Magnetic Moment and the Geochronological Implications. *Creation Research Society Quarterly* 8(1): 24-29.
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The  
geologic  
record of  
Earth's  
magnetic  
field goes  
back 3  
billion  
years.  
~

## Resources *continued from p. 15*

Williams, George C., and R.N. Nesse. 1991. The Dawn of Darwinian Medicine. *Quarterly Review of Biology* 66(1): 1-22. Evolution by natural selection explains many aspects of diseases. More good arguments for why we need to understand evolution. SASE + \$2.20 from NCSE.

Wilson, Allan, and R. Cann. 1992. The Recent African Genesis of Humans. *Scientific American* 299(4): 66-73. An example of how publishing deadlines can be treacherous! Excellent illustrated explanation of the "Mitochondrial Eve" hypothesis, the conclusions of which have been called into serious question since this went to press (see Sonleitner, p. 7). SASE + \$1.00 from NCSE.

Wood, B. 1992. Origin and Evolution of the Genus *Homo*. *Nature* 355: 783-790, 27 Feb. The article's title is a clue to content.

Zimmer, C. 1992. Ruffled Feathers. *Discover* 13(5): 44-54 (May). A fairly sober account of the controversy over "Protoavis" as early bird; quotes NCSE's Kevin Padian and others. Protoavis remains are fragmentary and mixed up and do not support the claim that it is a clearer ancestor than *Archaeopteryx*. SASE + \$1.00. □

## A Little Learning

Alexander Pope

A little learning is a dangerous thing;  
Drink deep, or taste not the Pierian spring;  
There shallow draughts intoxicate the brain,  
And drinking largely sobers us again.  
Fir'ed at first sight with what the Muse imparts,  
In fearless youth we tempt the heights of Arts,  
While from the bounded level of our mind,  
Short views we take, nor see the lengths behind;  
But more advanc'd, behold with strange surprise  
New distant scenes of endless science arise!

(Thanks to Hubert P. Yockey)



# Keeping Tabs

## John C. Whitcomb on the Road

Karl D. Fezer  
Concord College  
Athens, WV

~  
Lunar  
astronomers  
go to  
conferences  
every year,  
he said,  
where they  
spend their  
time  
laughing at  
one  
another's  
theories.  
~

Quite a few "creation scientists" spend their weekends visiting a church and giving five or six lectures, including Sunday school and a Sunday sermon, holding forth on the evils and absurdity of evolution. "Back to Genesis Seminars," with several speakers, are the biggest affairs, and they may attract 5-7000 people. Individual speakers are also active and effective. Evangelists of all stripes hit the hustings each week, and among the most prominent are those associated with the Institute for Creation Research.

When the public is invited to such events in my region, I try to attend. I sit near a front corner pew, and, during the question period, I wait until everyone else is finished asking questions (which seldom takes very long). I identify myself, say that I realize the audience came to hear the speaker, not me, but that I consider much of what the speaker has said to be wrong or misleading, and would you allow me to mention some of those things? Twice before (*C/EN* 5(3): 9-11; also, an unpublished report on a Bert Thompson weekend ministry available from me). I had initiated extensive and more or less amicable discussions, so I wanted to try it again when John C. Whitcomb was scheduled to speak in May 1991 at a local Baptist church.

I had received a flier announcing a "Bible and Science Conference" featuring Dr. John C. Whitcomb, senior author (with Henry Morris) of *The Genesis Flood*—the 1961 book which catalyzed the "scientific" creationist movement in this half of the century. "CHALLENGE!!!" said the flier's margin. "Come out and test your faith in Evolution. Don't let your Profs talk you out of it, Bring them!"

How could I turn down such a cordial invitation? This would be an opportunity to see a "founding father" in action and to hold Whitcomb publicly accountable for a few of the absurdities in his book.

Whitcomb's Friday night lecture/sermon was on the origin of the solar system. The sun and moon weren't created until Day 4 in order to make it plain that were not to be worshipped, so the light source on Day 1 was temporary, I learned. The Apollo program was a great waste and failure because science now knows LESS, in fact NOTHING, about

the origin of the moon. Before, we had the fission, capture, and co-creation theories, but Apollo proved them all impossible. (Whitcomb didn't mention the collisional ejection theory proposed in 1984.) Lunar astronomers go to conferences every year, he said, where they spend their time laughing at one another's theories. So stupid, when all we need is a child-like faith in *Gen.* 1:16.

Alas, there was no question period at all. Afterward I showed the flier to the church's pastor, who disclaimed the marginal notes. It seems "conference" means a teaching meeting as opposed to an evangelical one (a very subtle distinction)—not an opportunity to confer.

In the lobby, I asked Whitcomb about his suggestion, in *The Moon—Its Creation, Form and Significance* (1978), that the millions of asteroids and meteorites which have bombarded the Earth and moon nearly all arrived during Noah's Flood: Wouldn't that have vaporized the Flood waters completely? He referred me to his co-author, Don DeYoung, who wrote that chapter. Whitcomb's specialty, he explained, is a type of Biblical analysis that theologians neglect. Both Whitcomb and the pastor thought that any problems with creationist scholarship pale compared with the folly of not accepting God's word. For Whitcomb, the fundamental reality is that his life was meaningless before he converted, and now it has meaning.

Saturday night he invoked Pasteur, thermodynamics, and monkeys at typewriters in his lecture on the origin of life. You can't cut a frog into 15 pieces, he said, and then put them back together to make a live frog. This proves God adds life to inert matter. To compromise is okay when buying a car (Jews are very good at that sort of thing, he said), and in politics. But God will not tolerate compromise in religion.

I did not attend Sunday school ("Cave Men and Ape Men"), the sermon ("The Flood and the Final Judgment"), nor his Commencement address at a local Christian academy.

I did attend Whitcomb's Sunday night lecture on "Dinosaurs and Men," based almost entirely on *Job*



# Keeping Tabs

40 and 41. Seems that "Behemoth," seen by Job, may have been a *Diplodocus* or *Ultrasaurus*, because it had a "tail like a cedar." He didn't mention the Paluxy footprints, by the way, nor Behemoth's navel. Whitcomb informed us there was room on the Ark for two young dinosaurs of each kind, but after the collapse of the vapor-canopy the post-Flood world was inhospitable to their continued survival. And since the Flood was man's fault, the extinction of present-day species merely continues the destruction of creatures in God's originally perfect creation.

This last service featured a song sung by about 20 elementary school children. The lyrics spoke of evolutionary misinformation being forced on them at school. The catchy refrain was, "I'm no kin to the monkey; the monkey's no kin to me." The pastor then told the kids that not every teacher teaches that we come from monkeys—we have a lot of *good* teachers in the schools who teach what the Bible teaches.

I met three of my college's biology graduates in the congregation. One is a public school science teacher. □

## 1992 Twin-Cities Creation Conference

*Robert J. Schadewald*

The 1992 Twin-Cities Creation Conference will be held at Northwestern College in Roseville, Minnesota, on Wednesday through Saturday, July 29 through August 1. Conference registration is \$75 before May 1, \$85 before July 18, and \$90 at the door. For information, write to Twin-Cities Creation Conference, 6120 1st Ave. S., Minneapolis, MN 55419 or phone (612) 869-0949.

Conference sponsors include the Twin Cities Creation-Science Association (TCCSA), Northwestern College, and the Genesis Institute. TCCSA is among the country's oldest, largest, and most active local creationist groups. Northwestern College is a Bible college founded in 1902 by Reverend William Bell Riley, who later founded the World's Christian Fundamentals Association (1919). From its origin in the halls of the First Baptist Church, it grew into a 4-year, fully accredited school that now teaches a literal six-day creation and worldwide flood. The Genesis Institute was founded by Pastor Walter Lang after he was eased out of the Bible-Science Association (which he also helped found).

The tone and content of the 1992 Twin Cities Creation Science Conference will apparently be somewhere between the quadrennial International Creation Conferences organized by the Pittsburgh Creation Science Fellowship and the National Creation Conferences the Bible-Science Association (BSA) formerly sponsored. That is, the organizers intend it to be less technical and more religious than the Pittsburgh conferences but more scientific than the old BSA events.

The preliminary program lists about 50 speakers, at least half of whom have presented at National Creation Conferences. Many of the names are familiar to readers of *NCSE Reports*. Kurt Wise, a Harvard-educated paleontologist now at Bryan College, will give presentations in geology, paleontology, and evolution that should be interesting. At the other end of the scientific spectrum, "Dr. Carl Baugh, Ph.D." will show 3-D pictures of Noah's Ark taken from a Russian helicopter in 1990. (For a discussion of Baugh's scientific credentials, see *NCSE Reports* 9(6):15-18). Other names familiar to creationist-watchers include Bill Overn, Pastor Walter Lang, Gerardus Bouw, Jerry Bergman, Gary Parker, and David Kaufmann.

Conspicuously absent from the conference program are current staff members of the Institute for Creation Research and the Bible-Science Association. The latter might seem surprising because BSA headquarters is only about 10 miles from the conference site. Perhaps it is because TCCSA and BSA are barely on speaking terms (several of the conference organizers have been purged from positions of authority in BSA during recent years). Or perhaps the BSA people just elected not to submit abstracts.

The creation conference will be preceded by a two-day conference on Biblical Astronomy (geocentricity) on Monday and Tuesday, July 27 and 28, at the same site. The geocentricity conference is being sponsored by the Association for Biblical Astronomy (formerly the Tychoonian Society). Organizer Gerardus Bouw hopes to bring together the speakers who were scheduled to present papers at the canceled 1991 Conference on Absolutes in Cleveland. As of late March, no program had been published. Registration is \$25. For further information, write to either the Association for Biblical Astronomy (4527 Wetzel Avenue, Cleveland, OH 44019) or The Genesis Institute (7232 Morgan Avenue South, Richfield, MN 55423-2940). □

~  
"I'm no  
kin to the  
monkey;  
the  
monkey's  
no kin to  
me."  
~



# Keeping Tabs

## Attending a Creationist Seminar in Washington State

Carl Wigren  
Maple Valley, WA

Thomas Hoyle flashed slide after slide before a wall-to-wall audience packed in the Maple Valley Presbyterian parish hall. The public had been invited to witness this dramatic rebuttal of evolution, and Hoyle was touted as a man who could do it. The newspaper ad said that this Ph.D. candidate had given his "clear and understandable presentation one thousand times before," and now, this Sunday evening in the Seattle suburb of Maple Valley, the audience could choose between the "Word of God, or the world of God."

~  
According  
to Hoyle ...  
~

Prior to this glib invalidation of scientific enterprise, I had called assistant pastor Kathy Schwann to voice my consternation. Was she aware that there was nothing scientific about creationism? Was this church a fundamentalist sect? Affiliated with Presbyterian USA, she explained that members "believe in the absolute authority of the word of God." Sounded literalist to me, but maybe the f-word is out of style. She asked that I come with an open mind. Her invitation had the ring of an Amway spiel.

Despite my preparation, I had butterflies in my stomach as I walked into church. This was my first creation seminar. I nervously flipped through some books by Henry Morris in the vestibule and then, clutching *Voices for Evolution*, the National Academy of Sciences publication, and my questions, I took a folding chair.

Hoyle set the agenda. No questions until the end. Wouldn't want an evolutionist to break the continuity of half-truths and out of context quotations. Convenient. When he finished denigrating evolution, I asked him if he equated the stand on evolution of the Presbyterian Church USA with Godlessness. I was quickly censored by Kathy Schwann from the back of the hall. "Are you Carl? ...We already talked about this." She insisted that the issue was not appropriate in this setting. I tried in vain to read a short excerpt from *Voices* regarding the Presbyterian USA position.

At this point, a woman stood up on the opposite side of the hall. Most knew this fellow parishioner as the organist, but fewer probably knew she held a doctorate in social psychology and taught at a local university. She voiced her disapproval of the presen-

tation. The room was hushed. Amazingly, Hoyle belittled her comments, saying he believed "only half" of what she said.

Hoyle's unease was obvious, and audience discomfort was palpable. He fielded a few more innocuous questions and quickly closed. My new-found ally, the organist, said that this parish had gradually become more literalist, and that this presentation was the last straw. Many had decided to leave the meeting, herself included, and our conversation was cut short as swarms of parishioners converged on us both.

One of the more revealing conversations that followed was with an influential member of the congregation organizing a fledgling parish in a nearby town. He was keenly aware of the "secular humanist" conspiracy. Sensing my skepticism, he divulged that a local school district had knowingly hired two witches for teaching positions. Convincing! The folie a deux was complete when Hoyle, who was busy packing his Henry Morris library, added that public schools are indoctrinating children in secular humanism. Apparently his antidote is to masquerade fundamentalist beliefs as science. Remarkably, I learned, he is occasionally requested to speak at public schools.

"The Word of God, or the World of God?" Or, Hoyle or Hell? ☐

## Mormon Church Stance on Evolution

Eugenie Scott

The four-volume *Encyclopedia of Mormonism* (Macmillan 1991) summarizes the faith's history and doctrine. Written by lay members under Church hierarchical direction, is described as "authentic but not official."

Historically, Mormonism has encompassed believers ranging from a unique form of creationism to theistic evolution. Officially, the Church's ruling quorums have always left the matter open, except for belief in an overarching divine plan and an historical Adam. Refinements of the "Adam" concept have been variously developed, repudiated, and ignored. Dates for the age of the Earth and the development of life have ranged from short-term ones to those of modern

**Mormon**, continued on p. 21



## NCSE Enters Computer Age—Soon

NCSE will be “on line” soon. That’s computer jargon for: “available to people with computers connected to telephones via modems.” We’ll reach tens of thousands of new people via this electronic “Committee of Correspondence” network—potential members and potential sources of information.

We’ll have details in the next issue, but in brief, the new service will provide a “read only” Bulletin Board (BB) where NCSE can post information and requests for information. We’ll have our own corner of a very successful international computer network, Cleveland Freenet. As the name implies, it’s free—both to NCSE and to users. But contrary to the other half of its name, it will be accessible (free) virtually anywhere in the US or Canada and around the world via local phone calls, not just in Cleveland.

NCSE member Page Stephens is facilitating this for us. Cleveland Freenet operates via computer facilities at Case Western Reserve University. We will be listed in a menu of services—probably under the label “NCSE Creation/Evolution News.”

For people unfamiliar with bulletin boards, I should explain that there are two kinds, at least—one requires a dedicated “system operator” (sysop) because it is totally interactive; people post comments, others comment on these comments, etc., until the sysop prunes excess verbiage, deletes obscenities of choice, and overall makes sure that the sponsor’s views are not misrepresented. A read-only BB such as ours can invite comment without requiring full-time monitoring by an official sysop. Responses can be collected via electronic mail or the good old postal service—we won’t have to spend full-time monitoring the channel.

While many *Reports* readers have computers and use them with modems, most do not. So why is this item of interest? Because there are millions of people who *do* use computers, modems, and bulletin boards whom we have not reached. As one person told me, “You do a wonderful job—too bad nobody knows about it.” This may be too gloomy an assessment, but the fact is, we have a vast audience “out there” who should be interested in what we have to say. This computer network will let us get the word out rapidly (around the world in ten minutes?), and it should help us get information back almost as fast. □

## Robert M. West Elected to NCSE Board; Moyer Retires

Mac West was elected to the NCSE Board at the annual meeting in February. Currently a museum consultant, Mac has been affiliated most recently with the Cranbrook Institute in Michigan. Before that he was with the Carnegie Museum in Pittsburgh. NCSE looks forward to tapping his expertise in public science education and the financing of public understanding of science.

Mac replaces Wayne Moyer who cycled off the Board after long service as a Director and President. A science education supervisor in Maryland now, Wayne was formerly Executive Director of the National Association of Biology Teachers. He may be best known to many *Reports* readers as coauthor with the late William V. Mayer of a major critique of biology textbooks sponsored by People for the American Way.

John Cole was re-elected to the Board and reappointed editor of *Reports* and *Creation/Evolution*. □

## Mormon *continued from p. 20*

science. Officially, the issue has been left unresolved.

The encyclopedia continues the tradition of general openness. A notably terse article on “Evolution,” nominally written by Brigham Young University physicist William E. Evenson, clearly had input from the Church’s highest authorities. While asserting there was an “Adam,” the article makes clear that the method of creation is unknown. It cites official minutes of a 1931 meeting of the Church hierarchy wherein officers are charged to “leave geology, biology, archaeology, and anthropology . . . to scientific research, while we (the officers) magnify our calling in the realm of the Church.” Republishing this statement today effectively updates the endorsement of this hands-off approach.

This is an interesting stance. Mormons clearly seem to vary on the topic. □



# NCSE News

We extend a warm thank you to all of the individuals and organizations who donated to NCSE during 1991. 1991 was NCSE's most successful fundraising year ever! We sincerely wish to thank the following people and organizations who donated \$100 or more for their very needed support (\* notes an NCSE Supporter):

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## Secondary School Evolution

R. Steven Gumbay  
Kent Denver School  
4000 East Quincy Avenue  
Englewood, CO 80110-4998

I would appreciate readers' assistance. I am teaching what I believe is a unique course in Biological Anthropology at the secondary level (juniors and seniors) at an independent school here in Denver. Recently the ingredients fell into place for a new elective science course, and the result is a college level course and cooperative venture with the University of Denver Biological Sciences faculty.

1991 was the first year of this course. It has been an outstanding success, so far—one of the most popular courses in the school. To me this is a unique opportunity to introduce students to the science involved in the pursuit of the understanding of our origins. I would like to explore sources of possible grant funding to obtain teaching materials for this course.

I believe there is a tremendous need to help the large mass of biological science teachers who feel caught in the middle of challenges to today's science education. We cannot improve biological science teaching unless there is a strong effort on the part of the science and teaching communities to help each other combat the forces that misinterpret and misrepresent science to our children.

I am looking for support from NCSE members in pursuit of these goals. I look forward to a dialogue on these issues and am willing to do whatever I can to cooperate with others to achieve these goals. □

### NCSE's International Membership

NCSE now has members in 15 foreign countries as well as the USA: Australia, Canada, Czechoslovakia, Denmark, the United Kingdom, France, Germany, Guatemala, India, Japan, New Zealand, Norway, South Africa, Sweden, and Switzerland. "Scientific" creationism is a world-wide movement, unfortunately, but it is good to know that NCSE's message is getting out where it is needed.

## More Biology on Disk

Tired of simulated golf or Leisure Suit Larry on your computer? A new biology series from the University of Maryland's Academic Software Development Group will attempt to present a comprehensive series of CD-ROM biology programs for classroom use. The first, "Introduction to BioQUEST," is an introduction to the series—a sort of demo disk. Cost: \$100.

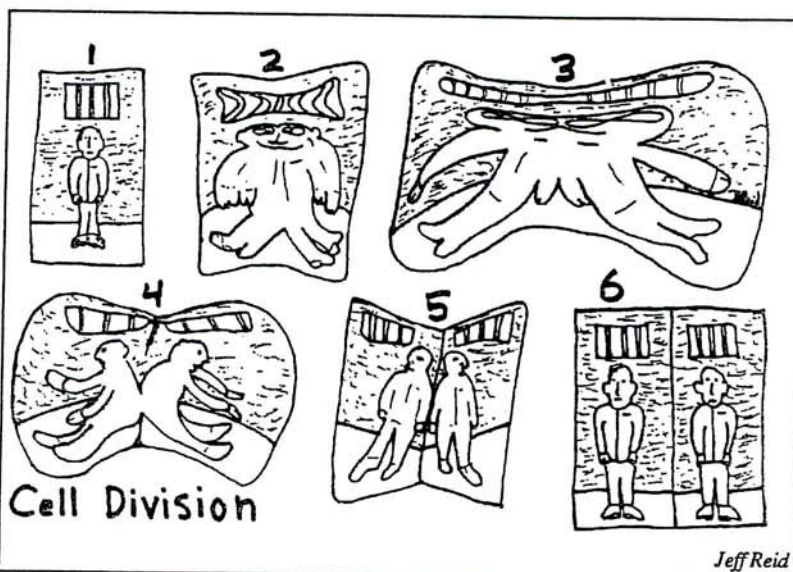
Other titles include: Biota, Biometrics, Cardiovascular Construction Kit, Data Collection and Organization, Environmental Decision Making, Genetics Construction Kit, and Sequence It!

For information, contact ASDC, University of Maryland, College Park, MD 20742. (301) 405-7600. ASDG@UMDD.BITNET. Site licensing will be available.

NOTE: If you try it, *NCSE Reports* would appreciate a short review. □

## New Skeptics Group Forming in Southern California

Dr. Stephen B. Mason, of the Institute for Human Progress, is forming a new "skeptics" group in southern California. The organization, the "Skeptics Society," has planned a speaker series at Caltech, and a publication. Write Mason at 15241 Cherbourg Avenue, Irvine, CA 92714-3120 for more information.





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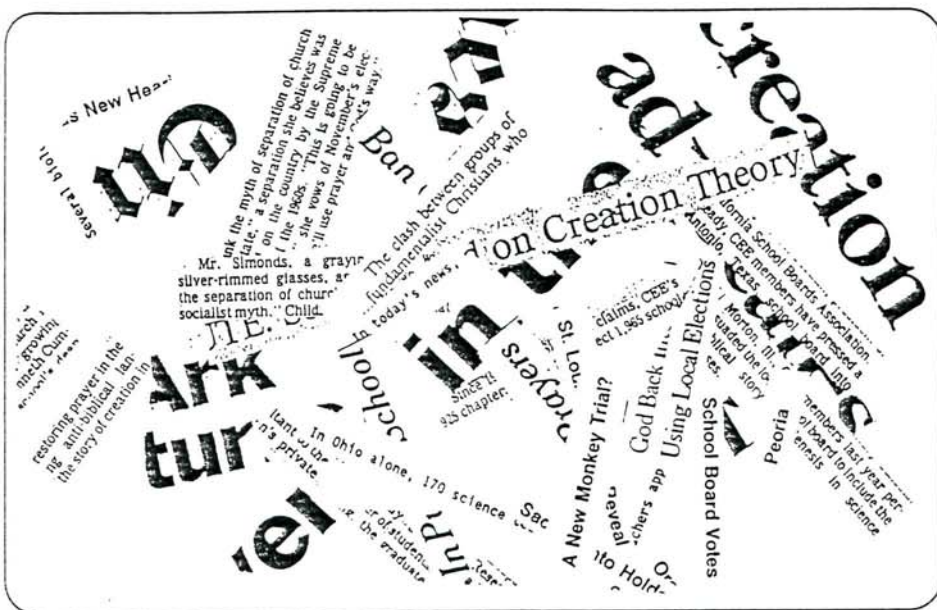
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## John Cole

The man charged with administering National Parks and enforcing many parts of the Endangered Species Act adds, "Nobody's told me the difference between a red squirrel, a black one or a brown one." While seeming to reject evolution, Lujan expressed a naive faith in adaptation when he observed, "All species adjust to change. I can't give you any specific examples, but I'm sure that biologists could give you examples of fish that all of a sudden here comes saltwater intrusion and slowly they adapt to a saltwater environment."

Lujan, continued on p. 5

## A Long, Hot Summer at NCSE

# Creationist Cases Blooming

*Eugenie C. Scott*

“Scientific” creationist attacks on public schools have suddenly taken a sharp surge upwards during the summer of 1992. Hot spots include the northwest and the middle west, with California of course not far behind. The NCSE office has had a long, hot summer. More details will be forthcoming in future issues of *Reports*, but for now, here is a “smorgasbord” of “current events:”

graders should take biology. Bad news: they decided the textbook in use, Holt, Rinehart and Winston's *Modern Biology*, was "too difficult." (Holt is considered a very middle-of-the-road textbook by most biology teachers.) Teachers recommended another Holt book, *Biology Today*, but that did not pass muster with the school board, either. Unanimously, the board rejected *Biology Today* because the it had the audacity to "treat evolution as a fact," which, incidentally, is called for in California's state curriculum.

Creationist Cases, *continued on p. 3*

**HESPERIA, CA** Good news: the Hesperia board of education decided that all tenth

## Contents

<i>Editor's Desk</i>	2
<i>Letters</i>	3
<i>News</i>	6
<i>NCSE News</i>	8
<i>Tracking Those Incredible</i>	
<i>Creationists</i>	10
<i>Resources</i>	14
<i>Keeping Tabs</i>	18
<i>Science Ed</i>	22
<i>CC Update</i>	23



# Editor's Desk

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**A**ntievolutionists continue to contradict optimists who would like to think that we're about to enter the 21st Century. Unscientific and antiscientific ideas abound in our society.

The coming Millennium has already inspired Millenarian thinking such as the writings of Hal Lindsay (*The Late Great Planet Earth*)—i.e., that the “End Times” are approaching with a “promise” of Armageddon (and that’s from the *optimists!*). The Lubbovitcher Rebbe recently declared that the Messiah is among us, so Jews, he says, should be ready to celebrate the end by 2000 (he hints that *he* may be the one).

We can expect a lot of craziness in the next few years because of the calendar. As an example of this, an environmental policymaker recently asked me for information about the projected effect of the millennium on the Earth’s magnetic field and climate. I was taken aback, at first, but I then tried to explain that “2000” was an arbitrary number—why not use the Jewish calendar, for example? 2000 is not even an accurate date if you accept it as meaning the number of years since the birth of Jesus—which scholars now treat as 4 to 7 years “B.C.” if they accept it at all! (And for that matter, 2001 C.E. begins the next millennium, not 2000.)

But this guy persisted—interested in my argument about the calendar, certainly, but still concerned. “Could you give me some references on that?” I was asked.

Examples like this show the need to keep trying, I think, rather than the futility of trying. (However, hair-pulling and discreet screaming may well be in order. . . .)

But on to some good news—The NCSE Computer Bulletin Board is in business, thanks to sysop Jim Kutz of Cleveland! For information about how to log on, see Jim’s article on page 8. It’s running courtesy of Cleveland Freenet and NCSE volunteers in Cleveland. It will allow computer connections all over the world.

In a few months, NCSE will publish a detailed index to the first ten years’ *Creation/Evolution* journal compiled by Ken Saladin. This will also be posted on the computer BBS for wider reference.

John Cole

## Erratum, Mea Culpa, & Oy!

Christopher Toumey was accidentally omitted from the biblio of an article in Issue 30 of *C/E*, and the next journal issue will include a proper correction. An article of his was also omitted because of layout requirements and will appear in the next issue, so he is doubly aggrieved! I do apologize. The reference was to his excellent 1987 University of North Carolina Ph.D. dissertation, *The Social Context of Scientific Creationism*. Rutgers University Press will be publishing a book version in coming months, and NCSE will publish the details when it is in print.



# Letters

Creationism is very much alive and well in South Africa, the hand of these fundamentalists being strengthened by the fact that there is little separation between church and state here. Not for nothing has the Dutch Reformed Church, the church to which most of the supporters of the ruling National Party belong, been called the National Party at prayer! And just as the church has in the past supplied the theological underpinning of apartheid, so the church has also been a vituperative opponent of evolution in particular and science in general. As I have been involved in a few writ-

ten debates with creationists, you will no doubt understand that *Creation/Evolution* has been of great value to me and that receiving this journal is of great importance.

L. W. Retief  
Bellville, South Africa

~

A couple of comments on issue 11(4):

The article on John Peloza states that "Interestingly, the creationist 'establishment' does not seem to have embraced Peloza." On more than one occasion I have heard Peloza as a guest on

*The Bible Answer Man* radio show, produced by the Creationist Research Institute (based in San Juan Capistrano, where Peloza teaches). Recently, readers were urged to write letters to the judge handling the appeal of the case and to make a showing in the court room. Although *The Bible Answer Man* usually deals with doctrinal matters and cults, evolution is a major topic of interest, and the CRI cooperates with the Institute for Creation Research. ICR staff occasionally appear on the program, while CRI president Hank Hanegraaff's [courtroom] testimony was

the subject of *ICR Impact* 205 (1990).

On p.20, there is a story on Marilyn vos Savant's reply to a letter critical of evolution from John Weldon of Chattanooga, TN. I suspect that this is the same John Weldon who is an associate of television evangelist John Ankenberg, whose show originates in Chattanooga. By the way, the new evolution series produced by *The John Ankenberg Show* (see *Reports* 10(6):18) still has not been broadcast [as of late April].

Thomas J. Wheeler  
Louisville, KY

## Creationist Cases *continued from p. 1*

"Most members of the Hesperia Unified School District Board of Trustees don't believe evolution correctly explains how there came to be a variety of species on earth. Instead, they contend that the Bible's account, known as creationism, is the true explanation," wrote the *Hesperia Daily Press* (6/10/92, B1; all quotes from this article.) "My concern is that if we approve this book—knowing the kind of community we live in—we are going to have problems," stated board president Jack Hamilton. His colleague, Lori Nielson, "said she could accept no book that mentions evolution. 'If parents want their children to know about this, they should teach them at home'" (my italics).

**STANWOOD, WA** In March 1992, 9th grade biology classes in Stanwood were treated to a guest lecturer: ICR spokesman Dr. Donald Chittick, speaking on "scientific" creationism. Parents found out about it when students reported hearing about "new science that isn't in our textbooks," including the existence of human and dinosaur footprints together, "and did you know, Mom, that scientists don't believe in evolution anymore?" Chittick also showed students a videotape about how science correlates directly with the Bible.

The biology teacher who arranged this has been teaching creationism for years, according to a newspaper article. Parents protested to the school board, which after a series of meetings, decided they would invite no more creationist speakers. A request for a policy statement on creationism is currently pending.

**ASTORIA, OR** An Astoria citizen, Mark Tanguay, challenged the middle school science textbook because it "didn't teach the creation theory alongside evolution theory when outlining the origins of humankind" (all quotes from *The Daily Astorian*, 5/29/92). 113 people signed a petition supporting his position. Due to a technicality, Tanguay's challenge to the textbook was rejected, but he returned within a month to request a curriculum change. "Tanguay said many people have called him to support his efforts. He said a representative of the California Institute for Creation Research has agreed to review his curriculum proposal when he finishes with it." NCSE member Jim Davis has kept up a lively debate in the local newspapers.

**(NAME WITHHELD) MI** In this small Michigan community near Flint, a biology teacher is facing pressure from a school board member because the advanced placement genetics book he has assigned his students this fall "teaches evolution as a fact." This newly-elected board member supports other religious right causes in addition to anti-evolutionism.

**ANOKA-HENNEPIN CO., MN** In the second-largest school district in Minnesota, creationists requested that the school board teach "scientific information that casts doubt on the theory (of evolution)" (*Star Tribune*, 6/12/92). "In the south-west corner of the state, they (science teachers) just don't want to talk about evolution," Clark [Dick Clark, from MN Department of Education] said. "They don't even mention evolution in

*Creationist Cases, continued on p. 5*



# Supreme Court Rules In Prayer Case

Eugenie C. Scott

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"... there  
are  
heightened  
concerns  
with  
protecting  
freedom of  
conscience  
from subtle  
coercive  
pressure in  
the  
elementary  
and  
secondary  
public  
schools. . ."

A narrow 5-4 vote upheld one of the most basic Supreme Court precedents on church-state separation. The Rhode Island case, *Lee v Weisman*, concerned prayer at public school commencement ceremonies (see *Reports* 11(3):9). Despite civil libertarian fears and religious right hopes, given previous positions of several justices, the Court did not follow the advice of the Bush Justice Department. The administration argued that the Court should change the procedures by which it had since 1971 determined whether a law or regulation violated the "establishment clause" of the Constitution.

This 1971 *Lemon v Kurtzman* decision requires in part that the courts look at the purpose for which a law or practice is enacted: whether its purpose is to advance or inhibit religion rather than promote a thoroughly secular interest. Virtually every court case regarding the teaching of creationism has been decided in whole or in part on the "purpose prong" of *Lemon*. Legislatures and school boards have been guided by this case for two decades. Thus it was with a sense of relief at NCSE when in late June the Supreme Court upheld lower court decisions in *Lee v Weisman* that prayers at commencement ceremonies were unconstitutional—and that the *Lemon* decision remained intact.

Voting to uphold the *Lemon* precedent (as somewhat expected) were the liberal Justice Blackmun and centrist Stevens. Justice O'Connor had been considered "iffy" on the topic, but she joined them. Somewhat surprisingly, Justice Souter also joined the majority, and the majority opinion was written by the generally conservative Justice Kennedy. However, the decision was narrow and the dissent ferocious.

The Justice Department had requested that the Court use *Lee* to re-evaluate the "*Lemon* test," especially

the "purpose prong," and substitute a more relaxed test of whether individuals were being "coerced" into participating in religious expression. Said Solicitor General Kenneth W. Starr, "Civic acknowledgements of religion in public life do not offend the establishment clause, as long as they neither threaten the establishment of an official religion nor coerce participation in religious activities."

To almost everyone's surprise, Justice Kennedy brushed aside that request, writing, "We can decide the case without reconsidering the general constitutional framework by which public schools' efforts to accommodate religion are measured."

The Court has traditionally held that public schools are places where religious expression must be carefully controlled. "As we have observed before, there are heightened concerns with protecting freedom of conscience from subtle coercive pressure in the elementary and secondary public schools. . . ." In cases having to do with creationism, for instance, an individual teacher's free speech rights must take second place *in the classroom* to the students' rights not to be proselytized in school. Obviously, a teacher or anyone else may promote religious beliefs outside the classroom.

In response to the State's contention that prayers at commencement were not coercive because attendance at graduation was voluntary, Kennedy wrote that prayers at commencement were inherently coercive, because "Everyone knows that in our society and in our culture high school graduation is one of life's most significant occasions."

The decision in *Lee* is a welcome one for those attempting to keep science classrooms free from sectarian religious influence. □

~  
Virtually every court case  
regarding the teaching of  
creationism has been decided in  
whole or in part on the "purpose  
prong" of *Lemon*.  
~



## Creationist Cases *continued from p. 3*

*class because they know what's coming and they just don't want to deal with it'*"(emphasis added).

The board passed a "compromise principle" saying that evolution should be taught as a theory, "not as an absolute scientific principle." Once again, evolution is being singled out for special treatment. As science is practiced today, *no* theory is an "absolute scientific principle." It would make just as much sense to say that "gravitation should be taught as a theory, not as an absolute scientific principle," but such a "compromise" would be considered scientifically unnecessary. It is also scientifically unnecessary for evolution to be so treated, but no religiously-based lobby is promoting anti-gravitation.

NCSE has for over a year been warning about new creationist euphemisms such as "intelligent design theory," "abrupt appearance theory," and the like. Anoka-Hennepin's controversy is a case in point: here we don't have creationism being requested, but "evidences (*sic*) against evolution." When such "evidences" are examined, surprise! They are identical to the arguments offered in "scientific" creationist literature: dust on the moon, the shrinking sun, etc. Calling innocently for "evidence against evolution" is merely "scientific" creationism in sheep's clothing.

**KIRKWOOD, MO** The science curriculum here was recently revised by about 20 teachers and administrators. Board member Randy Moore proposed that a section on evolution be amended with a statement distinguishing between "macroevolution" and "microevolution." In creationist-speak, these terms usually refer to descent with modification (macro), which they do not accept, and natural selection (micro), which they usually do.

Moore's statement admits, "There is general support for the concept of macroevolution within the scientific community," but he goes on to say, "However, there is evidence both for and against it, and it remains a subject of debate which should be examined. A dogmatic approach to macroevolution should be avoided."

Of course, there is no "debate" within the scientific community over whether evolution has taken place, though there is ample debate over how it took place, what evolved from what, and so on. The Kirkwood controversy offers a variant of the Anoka-Hennepin (and elsewhere) approach of not arguing for the teaching of "scientific" creationism *per se* but teaching the "evidence against evolution." More on Kirkwood later.

Whew! A long, hot summer, indeed. NCSE will keep you posted on these and other developments. □

~  
"If parents want their children to know about this, *they should teach them at home.*"  
~

### No Place Like Home. . . .

*USA Weekend*, a newspaper supplement modelled after *Parade*, reported in May 1992 on a 1988 Gallup Poll. Only 50% or fewer US adults could identify outline maps of Ohio, Missouri, New Jersey, Michigan or Massachusetts. A huge number could not locate the US on an unlabeled globe. Last one out, please turn off the lights. . . .

### Extra-Terrestrial Life (The Search)

NASA sponsors a project called SETI—Search for Extra-Terrestrial Intelligence. A curriculum project has been developed for schools by an extensive team including Dr. David Milne, the longtime evolution advocate who has often published in *Creation/Evolution*. Interested readers should contact Dr. Milne c/o 2035 Landings Drive, Mountain View, CA 94043.

### Maitland A. Edey dies at 82

Maitland Edey, coauthor with Donald Johanson of the 1981 bestseller, *Lucy: The Beginnings of Humankind*, died on May 9th, 1992. Edey joined *Life Magazine* in 1945 and edited Time-Life Books 1960-1972 where he was responsible for some of the innovative popularizations of evolution and nature topics in those book series. After retiring in 1972, he wrote six of his eleven books.

### Lujan *continued from p. 1*

Syndicated columnist Anthony Lewis commented a week later that he was amazed at Lujan's comments and also amazed at the lack of press or public reaction to them. A decade ago, there was a fair amount of outrage when Interior Secretary James Watt and his associates made similar comments. □



~  
“Because evolution is a controversial theory, use the word ‘adapt.’”  
~

## The Caleb Campaign for Creationism

One organization dedicated to spreading religion in the schools is the Caleb Campaign which Colorado director Bill Jack calls “a creationist youth ministry.” The Caleb Campaign distributes religious tracts and their newsletter, *Issues and Answers*, which features testimonials by athletes, a comic strip with a superman-like Christian high school hero and a heavy dose of creationism. Their tactics include training children as “youth pastors” who then distribute literature and otherwise proselytize their classmates.

In addition to schools, the Caleb Campaign targets museums which give informal tours led by docents. Young missionaries espouse creationist or Biblical interpretations of museum displays and literature, interrupting and embarrassing museum guides with creationist questions. There is nothing wrong with asking things like “How do you know it’s that old?” Unfortunately, however, many tour guides respond with frustration and anger when they either do not know the answers or when they find they are suddenly involved in a debate over creationism. Anyone who has ever seen a creationism debate can sympathize—few guides or teachers or professors are trained in debate. Amateur tour guides are often ill-trained in the subjects they describe, let alone in debate skills. (Excerpted from a report by Al Martin.) □

## Sea World Chickens Of The Sea

Eugenie C. Scott

Member Brad Lepper sends an excerpt from a training manual for tour guides at Sea World in Orlando, FL, originally published in the *Orlando Sentinel* Sunday magazine. It presents a list of negative-sounding “buzzwords” and their alternates for tour guides to use when dealing with the public. “Sick” animals should be referred to as “ill,” “captured” animals as “acquired,” “sex” is “courtship behavior,” “captivity” becomes “controlled environment,” and so on.

At the bottom of the list is an important no-no: guides should not say “evolve,” “Because evolution is a controversial theory, use the word ‘adapt.’” Of course, *evolve* and *adapt* refer to completely different scientific concepts, but, hey, we wouldn’t want to upset the public, now, would we? In the words of Arnold Clark, “All education is an invasion of privacy. It forces people to look at the world around them and to search within themselves.” □

## Creationism on Cable TV

John Cole

“Local Access Cable” is a wildcard in the American media, and “scientific” creationists use it.

Creationists are a staple of “Christian” cable TV and some local church broadcasts. But religious broadcasts have been reduced or eliminated in many television markets which used to offer them as public services or at extreme discounts.

Even big-time televangelists such as Jerry Falwell and Oral Roberts have reportedly seen their television empires shrink. Jimmy Swaggart and Jim and Tammy Bakker have hit *really* hard times. However, religious broadcasting is bigger than ever, and the majority of it is Christian literalist and/or fundamentalist; other faiths seem to be less willing or able to pay for television and radio exposure.

Local cable access provides virtually unedited time to anyone who shows up with a tape, and reports indicate that “scientific” creationists use it as much as they can. Combined with TV satellite technology, this new medium is able to reach a huge audience “off the record” to traditional TV monitors.

Monte Cole reports from Nebraska that “scientific” creationism is a steady, repeated topic on local access TV there. Ransie Traxler reports from Illinois that satellite broadcasts are similarly besieged by creationism—especially the argument that “scientific” creationism is being discriminated against in violation of free speech guarantees.

Maybe local access cable and obscure satellite channels are marginal, but creationists seem to be exploiting them relentlessly.

We’d like to hear reports about local programs, local audience estimates and news, etc.

Who watches? Who counts them? Who knows?

We don’t know the extent of these broadcasts—or narrow-casts. Could you let us know what your local area schedules? □

COMING UP . . . This Fall, NCSE will publish an index of the first ten years’ issues of *Creation/Evolution*, so stay tuned!



## Evolutionary Anthropology, a New Journal

Reviewed by John Cole

*Evolutionary Anthropology* has published volume 1, number 1 this spring. The 8.5" x 11" magazine format on slick paper may look like just one more magazine, but the articles are reports on professional research by an interdisciplinary body of scholars trying to synthesize current information in a non-journalistic professional manner. Rather than report on their specific latest research detail, authors write review articles on topics of their specialty.

Articles in the first issue: Richard G. Klein, *The Archaeology of Modern Human Origins*; Henry McHenry, *How Big Were Early Hominids?*; Eric Alden Smith, *Human Behavioral Ecology*; Patricia C. Wright, *Primate Ecology, Rainforest Conservation, and Economic Development: Building a National Park in Madagascar*. There are also news, reviews, and meetings columns.

Articles are documented with copious references via footnotes but written to read smoothly at a level I would gauge as "professional but accessible to the educated layman." One target audience is pre-college teachers. The writing is clear and at least somewhat cleansed of insular jargon because of the interdisciplinary target audience. John G. Fleagle is Editor; Associate Editors are Jane Buikstra, Fred Grine, Kristen Hawkes, Sarah Hrdy, Kenneth Weiss and John Yellen—all well-known to archaeologists and physical anthropologists, as are the inaugural-issue authors.

38 pages include 2 advertising pages and both sides of both covers. Six issues per year are \$36 (\$54 foreign), \$30 student (\$48 outside the US), \$145 for institutions from Wiley-Liss, PO Box 2575, Secaucus, NJ 07096-2575, USA.

The publisher obviously hopes to fill a niche and make the magazine self-supporting and profitable. I recommend it highly, judging from the first issue, and wish them well. The steep library rate is unfortunate in this age of slashed library budgets, however. Such high institutional journal prices are a common way to subsidize cheaper individual rates and to make up for the fact that a library subscription will be read by many people who might otherwise

subscribe directly, but the budget crunch on libraries is making the tactic potentially counterproductive to wide dissemination of periodicals such as this to readers who really need them. As a consumer I certainly don't prefer paying higher individual rates, instead! □

## Human Nature

Patrick McKim  
California Polytechnical Institute  
San Luis Obispo, CA

There seem to be two fallacious attitudes which are widely held, even among NCSE supporters, that need to be corrected. The first is that evolution is essentially about the past and has no particular relevance to issues of the present. The second error, related to the first, is the notion that while evolution is central to fields like geology, paleontology, and biology, it sheds little (if any) light on the psychology and behavior of modern humans. In the hope of correcting these mistakes, I would like to alert readers to a remarkable new journal, *Human Nature*, and an interdisciplinary society, the Human Behavior and Evolution Society (HBES).

*Human Nature* is edited by Jane Lancaster, a primatologist at the University of New Mexico, Albuquerque. Journal articles reflect "an interdisciplinary biosocial perspective," which is to say they proceed from evolution-oriented research. Among the topics covered in early issues are infanticide and child abuse, anorexia, male aggression against women, AIDS, and the evolution of violence. Forthcoming issues will include articles on feminism and evolutionary biology, animal culture, female mate selection, and menstrual taboos.

The journal is published by Aldine de Gruyter, 200 Saw Mill River Road, Hawthorne, NY 10532—\$60 for individuals, \$115 for institutions.

HBES includes members from anthropology, psychology, psychiatry, sociology, economics, biology, philosophy, law, and the arts. This year's convention is at the University of New Mexico-Albuquerque, 23-26 July.

For more information, write Margo Wilson or Martin Daly, Dept. of Psychology, McMaster University, Hamilton, ONT L8S 4L9 (Canada). □

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Forthcoming  
issues will  
include  
articles on  
feminism  
and  
evolutionary  
biology,  
animal  
culture,  
female mate  
selection,  
and  
menstrual  
taboos.  
~



## NCSE Computer Bulletin-Board Instructions

Jim Kutz  
(aa387@cleveland.freenet.edu)

The NCSE read-only computer bulletin-board on the Cleveland Free-net is up and running!

This bulletin-board contains a variety of articles and information supplied by NCSE, including the text of *NCSE Reports*. A detailed index for the first ten years' *Creation/Evolution* journal will be posted later this year. This information will be retained for reference on an ongoing basis.

No special knowledge is required to navigate the Free-net system, once you connect. The system is entirely menu driven and user friendly. The only navigational command you need to remember is 'go skeptic', which takes you to the menu containing the NCSE board. Once you are on-line, you will be able to sign up for a password which will allow you to send and receive e-mail both on The Cleveland Freenet and (SEE BELOW) over a number of other systems.

Please contact us by e-mail as soon as you are able. Our e-mail address on The Cleveland Freenet is **xx029**.

The NCSE Bulletin Board can be accessed in any of three ways.

### Direct Dial Access

The Cleveland Free-net has forty dial-in modem lines, soon to be expanded to seventy-two lines. Anyone may dial in as a visitor at (216) 368-8888. Traffic tends to be heavy, so you may want to auto-redial until you get through.

Almost any modem will work. The modem settings required are the same as for most other large systems, namely eight data bits, no parity, and one stop bit. The system adjusts automatically to modem speeds from 300 baud to 2400 baud. Some of the lines can also connect at 9600 baud. If your terminal program has an option for 'auto detection' of baud rates, have it turned on so that you get the fastest connection possible.

Some of the Free-net modems also support automatic error correction and data compression (v32.bis). You don't need to worry about that, though, be-

cause Free-net automatically negotiates a connection.

Once you're connected, hit the RETURN key twice. You should then see a 'welcome' screen followed by a menu.

### Telnet Access through Internet

If you have direct access to Internet through a university or other institutional computer system, you can 'telnet' directly to the Cleveland Free-net, thereby avoiding busy signals and long-distance charges. A few of the larger local BBS systems also offer telnet access to their subscribers. Contact your local system administrator to find out whether you can 'telnet', and if so, how to go about it from your location.

Here are the telnet addresses for Free-net:

**freenet-in-a.CWRU.EDU**  
**freenet-in-b.CWRU.EDU** (best choice)  
**freenet-in-c.CWRU.EDU**

### Electronic Mail Access From Other Networks

If you can't reach Free-net directly, you may be able to get the information you want by electronic mail. Free-net has electronic mail connections with a number of other widely used networks via Internet, including CompuServe, America Online, Bitnet, Fidonet, RBBSnet, and a variety of other networks. If you're on a network that has a 'gateway' to Internet, you can reach us there. Contact your network administrator and ask how to get a message through to the following Internet address:

**xx029@cleveland.freenet.edu**

If you're on a network other than Internet, your system administrator may need to 'customize' that address to include the necessary routing information for the gateway nearest you. If you can't get through, send a U.S. mail letter to The NCSE Computer Bulletin Board c/o The South Shore Skeptics, P.O. Box 5083, Cleveland, OH 44101.

Written material for the BBS will, for legalish reasons, be posted directly by NCSE—we're reprinting things also published in hard copy, for now; send comments on diskette to the NCSE office or to the NCSE publications editor, who welcomes (and shamelessly begs for) letters and articles. □

~  
CompuServe,  
Bitnet,  
Fidonet,  
RBBSnet,  
etc.  
~



## Kudos for NCSE Supporters

In May 1992, Columbia University awarded an honorary doctorate to NCSE Supporter Johnnetta Cole, President of Spelman College in Atlanta. In a separate commencement ceremony, NCSE Supporters received two of the four Columbia Teachers College Medals for Distinguished Service to Education—Dr. Cole and Harvard professor Stephen Jay Gould. Supporter James D. Ebert received an honorary doctorate from Duke University. In June UCLA awarded Gould its highest honor, the UCLA Medal.

This list was compiled from reading one newspaper; there are probably other names we should list. Our congratulations to NCSE-ers for their recent honors (and apologies to those we have overlooked!). □

## Another NCSE Member Receives MacArthur Fellowship

NCSE member Gunter Wagner, a professor of biology at Yale University, has been named one of 33 MacArthur Fellows for 1992. Wagner's research has been in developmental biology and population genetics.

MacArthur prizes, popularly known as "genius awards," amount to \$150,000 to \$375,000 over a five-year period for people selected as "exceptionally gifted individuals." They are nominated by a secret panel of 100 and awarded by a selection committee and the John D. and Catherine T. MacArthur Foundation Board.

Dr. Wagner is the latest of a series of NCSE members to receive a MacArthur Fellowship, and we extend our congratulations. □

## Two Videos from NCSE

Two NCSE videos for classroom use are being distributed by the University of California Extension Media Center: *How Scientists Know about Human Evolution* and *How Scientists Know about Punctuated Equilibria*.

Of the first video, University of Colorado Professor of Anthropology Darna Dufour writes, "This is how we should be teaching science. The crucial theme of 'How We Know' is consistently developed in the video. It is an excellent survey of human evolution for all students in introductory anthropology or biology."

Reviewer Marcia Clarke, a science teacher at Mercy High School, San Francisco, writes, "This is excellent. It's simple, clear, direct, and very useful. It stresses concepts and processes rather than quantification, so it really holds students' interest. It lays a broad foundation that enables a junior or senior high school teacher to go off in many directions with it."

The video takes the viewer step by step through the reasoning and decision-making processes used to determine a fossil's place in the evolutionary record. It shows the various scientific disciplines brought to bear on data and demonstrates clearly that fossils are not assigned to categories in the haphazard or intuitive way critics often claim.

The "punk ek" video shows Stephen Jay Gould explaining how fossil data led them to develop their ideas challenging orthodox gradualistic evolution. They explain their ideas clearly and show how their view grew out of Darwinian theory and is in no way "anti-evolutionary," as creationists frequently claim.

Reviewer Jere H. Lipps, Director of the University of California-Berkeley Museum of Paleontology, praised the tape. "A crisp, enlightening explanation of how science works. High school and college biology students will be excited to see how two eminent scientists looked at the fossil record and developed an alternative way to account for it."

Both videos are being sold and rented by UC Berkeley Extension Media Center, 2176 Shattuck Avenue, Berkeley, CA 94704 (510-642-0460). Rentals are \$40 per title; sales are \$175 each. The "Human Evolution" catalogue number is #38102; "Punctuated Equilibria" is #38110.

Most schools in the country have access to UC audiovisual catalogues. Interested readers might want to mention these tapes to local teachers. □

~  
"... an excellent survey of human evolution for all students in introductory anthropology or biology."  
~



## Back To Genesis in West Virginia

Karl D. Fezer  
Professor of Biology  
Concord College, Athens, WV

The ministry of the Institute for Creation Research reaches more people now that it runs "Back to Genesis Seminars." These typically two-day sessions sometimes attract thousands of people to weekend meetings—the high-tech descendant of revival meetings. They are held all over the country.

I attended one held October 25–26, 1991.

I first saw the event promoted the previous May at a weekend seminar featuring *Genesis Flood* co-author John C. Whitcomb in a church 90 miles from Charleston. Later, glossy fliers reached me from various sources. Several weeks before the event, a Concord College student invited me to another local church to see a creation/evolution film. This film, with the service built around it, served the dual purpose of generating interest in the forthcoming Charleston event and edifying those who couldn't make it to Charleston. Perhaps 200 people attended this local service.

The film shown, *The Genesis Solution*, was mostly a Ken Ham sermon, augmented by diagrams and cartoons. Ham has become the ICR's most ardent evangelist. His message: Evolution is the *foundation* of all challenges to God's word, and those who know God's word should not tolerate alternatives.

Later, at the end of the Charleston program, we were told that this film had 106 similar showings in West Virginia.

The Charleston seminar was preceded by a "school assembly" Friday morning for grades K–6. According to a page-one story in *The Charleston Gazette*, 2500 children in the Municipal Auditorium heard Ken Ham ask, "Did dinosaurs get on Noah's Ark?" and "Was the earth formed millions of years ago?"—with the children shouting back "Yes!" and "No!" respectively. ICR staffers said about 80% of the children were home-schooled or from Christian private schools in West Virginia. According to the *Gazette*, "some parents took their children from public schools to attend the 90 minute seminar. A few public school teachers may have taken their entire classes, but neither county nor ICR spokesmen were sure."

The Seminar itself, also held in the Charleston Municipal Auditorium, began Friday evening and continued through Saturday evening. It consisted of nine 45–60 minute lectures—three each by Ken Ham, John Morris, and Duane Gish—plus three films. Ham lectured on "Genesis 1–11: An Overview," "Genesis and the Decay of the Nations," and "Genesis Evangelism." The three speakers scheduled 8 additional sermons or talks Sunday.

Ten days before the event, the *Gazette* published a critique by me in which I gave specifics about a number of instances of dishonesty and nonsense perpetrated by ICR. Apparently it made an impression, because each of the three speakers referred to it at least twice. John Morris told the crowd that Fezer attends creationist meetings and disrupts them. Since the latter claim is false, I spoke to him privately and asked him to retract his statement, which he did in his next lecture.

All speakers kept promoting various books for sale on more than a dozen tables in the lobby and on more tables behind curtains on the auditorium stage. Ample time was allowed between lectures for the perusal and purchase of books. The front page story in *The Charleston Gazette* was accompanied by a full-color portrait of the greenbacks in a book-table cashier's money-box. A subsequent letter from ICR's Mark Looy complained about the erroneous impression created by this picture and told of how little money they make from book sales.



OH, OGH! NOT SCIENCE FICTION AGAIN?

~  
Evolution is  
the  
foundation  
of all  
challenges  
to God's  
word, and  
those who  
know God's  
word  
should not  
tolerate  
alternatives.



# Incredible Creationists

At the last lecture ICR's Ken Ham announced that costs had been covered by prior church contributions and by a collection taken Friday evening, and that no further collection was needed. He claimed

the event had reached 6000 people, including 3500 children, and that the total for the weekend would rise to 7000. I estimated peak Saturday attendance to have been about 1200. □

## Christian Leadership Ministries on Campus

In Spring and Summer 1992, Christian Leadership Ministries (CLM) has been circulating a long letter and a "National Survey of Christians." CLM is a branch of the well-known Campus Crusade for Christ, founded and led by Bill Bright. CLM's director, J. Stanley Oakes, has as his "mission" the task of evangelizing college faculty rather than students.

NCSE has always firmly supported the rights of people to their own beliefs and the right to proselytize—but not in the public school classroom. College students are usually considered to be adults, so professorial bias becomes a clearer matter of "academic freedom." There are supposed to be limits to academic freedom which can be used to protect students from incompetence or undue pressures from teachers—sexual harassment is the most obvious example, but religious harassment can be a problem, as well.

Oakes writes that "... Christians are under the most ferocious and vicious attack ever on American college campuses." He quotes evangelist James Dobson: "*Nothing short of a great civil war of values rages today throughout North America.*"

With 60 paid, fulltime field staffers, Oakes wants to reach every "Christian" professor in America, because a network of only 11,000 professors "will be able to share the Gospel with 4,400,000 students this year!" His goal is to reach 13 million college students each year via their professors.

Many NCSE members are uneasy about using college classrooms or professorial authority to evangelize. Campus Crusade for Christ has not stressed creationism, in the past; rather, they have been vaguely in the "Old Earth Creationism" camp. However, one of their prominent speakers, Texas A&M professor Walter Bradley, lectures widely on "The Scientific Evidence for the Existence of God," for example. Does this ever constitute an unfair use of professorial status to influence students?

This is a report without a tremendous punchline. I am not speaking for NCSE in any official way in raising the issue of college campus proselytizing,

although I do think there should be some logical limits so that professors do not abuse their power. I'm not at all proposing that campuses ban speakers favoring religious viewpoints but rather urging that both faculty and students keep clear the differences between personal beliefs and disciplinary knowledge. □

## New Creationist Group

Paul Lewis gave me two copies of *NCSE Reports* (10(5); 10(6)), and I read them. It was interesting to see how skeptics view creationists, and I was glad to see that you worry about us.

I enclose a copy of *Creation in the Crossfire*, which is published by the South Bay Creation Science Association. I am its editor, and my wife is copy editor. *Creation in the Crossfire* began in February '92 as a special section in our monthly newsletter. You might find this development alarming, since this is strictly a grassroots publication. We hope to expand our readership to churches throughout the South Bay.

Dr. Walter Lang, who founded the Bible Science Association, visited our chapter of the association recently and told us that creationism will probably replace evolution as the dominant viewpoint within the next 70 years. That is possible, especially since the hopeless, despairing influence of humanism and evolution has nearly wrecked our public school system and has caused a massive exodus to private schools and home schooling. In the early 1960s there were 1500 private Christian schools, but by the mid-1980s there were roughly 30,000 and increasing. More than ever, parents are demanding tax credits for educating their children in private schools. One day they might succeed in getting them. The more evolutionists and humanists push their propaganda, the greater the exodus will become. You yourselves are your own worst enemies.

Jon Covey, SBCA  
22322 Harbor Ridge Lane #2  
Torrance, CA 90502



## B o o k s

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<b>NEW</b> Peters, <i>From the Beginning, The Story of Human Evolution</i>	14.95	11.95
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### Kids Books

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*Listing items here or offering to distribute them does not imply NCSE endorsement or agreement; annotations are by the editor or various contributors.*

Anon. 1992. Why Adam Had Two Wives. *Ascent* (newsletter), pp. 1-4. Lilith was No. 1.

Aquistapace, Fred. 1992. *50 Ways to Help Yourself, Your Organization, & Your Community*. Sta. Rosa, CA: Eye-Opener Books. Members of Committees of Correspondence may want to check out these nifty ideas for raising money. \$6.95 from author, Box 1531, Santa Rosa, CA 95402.

Bailey, W.J., J.L. Slightom and M. Goodman. 1992. Rejection of the "Flying Primate" Hypothesis by Phylogenetic Evidence from the e-Globin Gene. *Science* 256: 86-89. (Bats 'n biochemistry).

Bethell, Tom. 1992. Darwin in the Dock. *The American Spectator*, June, pp. 14, 16. A long-time New Right antievolutionist looks at Phillip Johnson at a meeting and comments on Scott, Padian, Jukes, etc.—doesn't care for us, likes Johnson's antievolutionism heroics. Available from NCSE for SASE + \$1.00.

Bizzo, N.M.C. 1992. Darwin on Man in the *Origin of Species*: Further Factors Considered. *Journal of the History of Biology* 25(1): 137-147. The book had been expected to focus on humans but did not. SASE + \$2.50.

## Darwin on a Disk

*Darwin* is a \$29.95 HyperCard Stack (an interactive computer format widely used in schools). It includes some of Darwin's own writings and his theories plus reviews by his allies and critics. There is a Darwin biography and a survey of his place in scientific, religious, and social contexts, and an assessment of his impact in the Twentieth Century.

Sounds very interesting, but we haven't seen it. A short review would be welcome (hint, hint, beg, beg).

It is available for *Macintosh* computer users from Chariot Software; call (619) 298-0202 for orders and/or info. ☐

Bruce, Steve. 1990. Modernity and Fundamentalism: The New Christian Right in America. *The British Journal of Sociology* 41(4): 447ff. Haven't seen it.

Brush, Stephen G. 1992. How Cosmology Became a Science. *Scientific American* 267(2), August: 62-70. NCSE Supporter reviews history of Big Bang theory. Available from NCSE for \$2.00.

Cartmill, Matt. 1990. Human Uniqueness and Theoretical Content in Paleoanthropology. *International Journal of Primatology* 11(3): 173-192. Argues for more theory, less emphasis on humans.

Colp, Ralph, Jr. 1992. "I Will Do My Best": How Charles Darwin Obtained a Civil Pension List Pension for Alfred Russell Wallace. *Isis* 83(1): 3-26. Sheds light on how Darwin helped his rival.

Culotta, Elizabeth. 1992. A New Take on Anthropoid Origins. *Science* 256: 1516-1517, 12 June. Was ancestor of apes tarsier-like, lemur-like, or some third group? Report from a Duke conference.

Doyle, Andrea, B. Mintz, and P. Wasserman. 1991. Teaching Population: Which Textbook to Choose? A Survey of Secondary Science Textbooks. Analysis of the treatment of population issues in high school biology textbooks, by ZPG staffers. Available from them for free at Zero Population Growth, Inc., 1400 16th Street, NW, Suite 320, Washington, DC 20036 (202) 332-2200.

Fox, Richard C., G.P. Youzwyshyn, and D.W. Krause. 1992. Post-Jurassic Mammal-like Reptile from the Palaeocene. *Nature* 358: 233-235. Therapsids lived long after their rumored Jurassic extinction.

*The Freedom Writer: The National Newsletter that Defends the Separation of Church and State*. ISSN 1059-6372. 4 pp, 6/yr, from Institute for First Amendment Studies, PO Box 589, Great Barrington, MA 01230. \$25/yr; SASE (to them) for a free sample copy. Edited by a former fundamentalist minister, Skipp Porteous.

Gibbons, A., and others. 1992. The Evolution of Sexes. *Science* 257: 324-330, 17 July. A mold with 13 sexes, foetal development, sexual selection, symmetry, etc., and research on whether female primates are necessarily choosy about sex partners.



# Resources

- Gibson, William, and Bruce Sterling. 1992. *The Difference Engine*. NY: Bantam. 429 pp., \$5.99. Science fiction look at Britain in 1855 assuming Charles Babbage's computer technology had caught on, Darwin's *Origin* had been published in 1840 and scientists controlled political policy.
- Goodman, Billy. 1992. Directed Mutations: Heredity Made to Order. *Mosaic* 23(1): 24-33. That bacteria may be able to mutate in response to environmental cues could add a wrinkle to evolutionary theory but not a major one. **SASE + \$2.00 from NCSE.**
- Gould, Stephen J. 1992. Eve and Her Tree. *Discover*, July, pp. 32-33. The biggest problem with Mitochondrial Eve is the catchy name, he writes.
- Gould, Stephen J. 1992. Impeaching a Self-Appointed Judge. *Scientific American* 267(1) July: 118-121. Devastating review of lawyer Phillip Johnson's book, *Darwin on Trial*. **SASE + \$1.00 from NCSE.**
- Gutin, J.C. 1992. Why Bother? *Discover* 13(6): 32-39 (June). Latest ideas on one of the hot topics in evolutionary theory, the origin of sex.
- Hastings, Ronnie. 1992. For Your Information: A Creationist Blunder Table. *Bulletin of the Houston Geological Society* 34(10): 39-41. Documentation of various creationist Paluxy Creek claims by NCSE Board member and long-time Paluxy researcher. **SASE + \$2.00 from NCSE.**
- Heppenheimer, T.A. 1992. The Grandest Unification. *Mosaic* 23(1): 34-44. Quantum gravity, wormholes to other universes, and other exotica in contemporary cosmogenesis and astrophysics—explained for the non-specialist. **Available from NCSE for SASE + \$2.00.**
- Holland, J.H. 1992. Genetic Algorithms. *Scientific American* 267(1) July: 66-72. Emulating the process of evolution to solve complex design problems—indirect proof that natural processes can produce new and useful "designs."
- Horner, J.R., D.J. Varricchio and M.B. Goodwin. 1992. Marine transgressions and the Evolution of Cretaceous Dinosaurs. *Nature* 358: 59-61, 2 July. Transitional taxa found in intervening sediment layers in Upper Cretaceous North America. **SASE + \$2.00.**
- Inger, S. 1992. Questions and the Answer for Chronologists. *New Scientist* 134(1821): 44. Review of B. Dalrymple book.
- Klein, Richard G. 1992. The Archaeology of Modern Human Origins. *Evolutionary Anthropology* 1: 5-14. Adding archaeology to mtDNA and paleontology debate, Klein says the stone tools point to an African origin, not multiple origins for *sapiens*. **SASE + \$2.00 from NCSE.**
- Knoll, Andrew H. 1991. End of the Proterozoic Eon. *Scientific American* 265(4): 64-73. Did a rapid increase in atmospheric oxygen make multicellular life possible?
- Lewis, Ralph W. 1986. Teaching the Theories of Evolution. *American Biology Teacher* 48(6): 344-347.
- Lewis, Ralph W. 1988. Biology: A Hypothetico-Deductive Science. *American Biology Teacher* 50(5): 362-366.
- Livingstone, David N. 1992. *The Preadamite Theory and the Marriage of Science and Religion*. Transactions of the American Philosophical Society Volume 82, part 3; x+81 pp. \$15.00, pb. 19th Century movement in theology attempting to deal with evolution by proposing a "race" of pre-Adamites; some discussion of 20th Century uses of the idea such as in the Catholic Church.
- McCartney, Kevin. 1987. Review of *The Myth of Evolution*, by Louise Thomas (1985). *The Florida Anthropologist* 39(1-2): 85-87. A critique of an anti-evolution book (not the similar title by NCSE supporters!).
- Maxwell, Joe. 1992. New Kingdoms for the Cults. *Christianity Today* pp. 37-40, 13 January. Report on evangelizing Eastern Europe and "threat" of "cults" such as Mormons, Unitarians, Buddhists, Jehovah's Witnesses, Hare Krishnas, etc. **SASE + \$2.00.**
- Miller, Louis H. 1992. The Challenge of Malaria. *Science* 257: 36-37, 3 July. The distribution of malaria and the very similar distribution of the genetic factor which resists it—and the resurgence of the disease.
- Nazario, Sonia L. 1992. Crusader Vows to Put God Back into Schools Using Local Elections. *Wall Street Journal* 7/15/92, pp.1, ff. Traces evolution and successful adaptation of Robert Simonds as Religious Right leader & successes of Citizens for Excellence in Education in getting



# Resources

members elected to school boards. **SASE + \$0.50 from NCSE.**

Novacek, M.J. 1992. Mammalian Phylogeny: Shaking the Tree. *Nature* 356: 121-125 (12 March). Review article, fairly technical.

Peters, David. 1991. *From the Beginning: The Story of Human Evolution*. NY: Morrow Junior Books. 128 pp, heavily illustrated. \$14.95. "One of the best nonfiction books of the year," says the New York Public Library. **Avail. from NCSE at discount; see centerfold.** An NCSE review is pending.

Powell, C.S. 1992. The Golden Age of Cosmology. *Scientific American* 267(1), July: 17-22. Discussion of the recent discovery of faint background radiation variations supporting "Big Bang" theory.

Ritvo, Lucille B. 1990. *Darwin's Influence on Freud: A Tale of Two Sciences*. New Haven: Yale University Press. 267 pp, \$30.

Rivera, Maria C., and James A. Lake. 1992. Evidence That Eukaryotes and Eocyte Prokaryotes Are Immediate Relatives. *Science* 257: 74-76. and news article, Researchers Find Organism They Can Really Relate To, p. 32. Controversial research showing peculiar unicellular Eocytes are more closely related to the cells of higher organisms than to other bacteria. **SASE + \$1.50.**

Roberts, Michael B. 1986. The Roots of Creationism. *Faith and Thought* 112(1): 21-25. View that modern young-earth creationism does not have roots in 19th Century British and American "orthodox churches" but rather with George McCready Price. By a British clergyman and distributor of NCSE literature. **Large SASE + \$2.00.**

Sansom, I.J., M.P. Smith, H.A. Armstrong and M.M. Smith. 1992. Presence of the Earliest Vertebrate Hard Tissues in Conodonts. *Science* 256: 1308-1311. Earliest vertebrates pushed back ca. 50 million years to Late Cambrian, 515 million years ago. Technical; news article summary by D.E.G. Briggs in the same issue, pp. 1285-1286. **SASE + \$1.00 from NCSE.**

Sarkar, Sahotra. 1992. Thinking of Biology: Sex, Disease, and Evolution—Variations on a Theme from J.B.S. Haldane. *BioScience* 42(6): 448-453. Does sex produce genetic variability as a defense against parasites?

Shreeve, James. 1992. The Dating Game. *Discover*, September, pp. 76-83. New dating techniques and the controversial push-back of "modern" human origins.

Smocovitis, V.B. 1992. Unifying Biology: The Evolutionary Synthesis and Evolutionary Biology. *Journal of the History of Biology* 25(1): 1-66. History.

Smuts, Barbara. 1992. Male Aggression against Women. *Human Nature* 3(1): 1-44. Sociobiological analysis of cross-cultural differences using evolutionary theory. **SASE + \$3.50 from NCSE.**

Stewart, D. 1992. Petrified Footprints: A Puzzling Parade of Permian Beasts. *Smithsonian* 23(4): 70-79, July. More tracks.

Thelin, Gail, and R.J. Pike. 1992. *Landforms of the Coterminous United States*. Map 1-2206, with brochure. USGS, Branch of Distribution, Box

25286, Federal Center, Denver, CO 80225. \$5.00 ppd. Digital US topographic relief map almost 5' wide. ("Awesome," to quote a young [re]viewer; "Bogus—NOT!").

Thewissen, J.G.M. and S.K. Babcock. 1992. The Origin of Flight in Bats: To Go Where No Mammal Has Gone Before. *BioScience* 42(5): 340-345 (May).

Tobias, Phillip V. 1992. Piltdown: An Appraisal of the Case against Sir Arthur Keith. *Current Anthropology* 33(3): 243-294. With comments on the article by a number of other scholars.

Torrens, Hugh. 1992. When Did the Dinosaur Get Its Name? *New Scientist* 4 April, pp. 40-44. Dinosaurs and the evolution debate in the 1840s. **SASE + \$2.00.**

Toumey, C.P. 1990. Sectarian Aspects of American Creationism. *International Journal of Moral & Social Studies* 5(2): 116-142. Like the title says. □

## Dinosaurs in National Parks

Dinosaurs are the subject of a quarter of the summer 1992 newsletter for National Park Service managers, *Park Science*.

Eight of the 32 pages discuss fossils and trackways at various parks. Recent research on tracks, population estimates, and biomechanics at Lake Powell and Dinosaur National Monument is summarized and illustrated. Copies are available from the NCSE Resource Center for \$2.00.



**CORRECTION.** In the last issue (*Reports* 12(1): 14) a "Resources" reference to Hillis, *et al.* was confused and confusing, as more than one correspondent has noted.

"Experimental Phylogenetics: Generation of a Known Phylogeny," by David M. Hillis, *et al.* in *Science* 255: 589-592 (31 Jan. 1992) reports on a dramatic experiment. Few evolutionary histories have been traced in detail, step by step. In this experiment, a virus was exposed to a mutation-causing agent, and the actual phylogenetic lineages were traced and "mapped." The goal was to test the effectiveness of methods for inferring phylogeny and ancestral genetics. "The results of this study directly support the legitimacy of estimates for phylogenetic estimation. . . ." The observed "family trees" had evolved in the same ways that simulated, theoretical phylogenies do. (Still available from the NCSE Resource Center—SASE + \$0.50.)

## Review

*Darwinism in the Press: The Evolution of an Idea*, by Edward Caudill. Hillsdale, NJ:Lawrence Erlbaum Associates. 1989. 161 pp, hardcover; \$24.95.

Caudill surveys press coverage of evolution over the past century and a half in the U.S. and Britain. He deals at length with the role of evolution in the 19th Century development of social science as well as scientific racism—the latter an important factor fueling some aspects of antievolutionism such as William Jennings Bryan's crusades.

The book strains to avoid "value judgements," although the author obviously takes evolution for granted, whether or not he understands it in detail. The result is the journalistic "On the one hand, and on the other hand . . ." pretence of non-judgement. Caudill the reporter seems a bit bemused by scientists' "bias" in favor of what they think is correct—they don't share his vague, intellectual "equal time" approach. He doesn't like formal denunciations of creationists, for example, even though he clearly thinks they're terribly mistaken.

Scientists and educators hoping to influence public debate should read this book. It illustrates clearly the different agenda of the reporter versus the scholar or

researcher. Caudill notes, rightly, that the press tries to reflect public tastes (and sometimes advertisers' tastes, I would suggest); it may attempt to shape political opinion or echo it; promoting sound science education is not always the same thing as "good journalism" because it is usually seen as one more (fairly small) advocacy group position. JRC

## Especially for Teachers

AAAS. 1992. *Sourcebook for Science, Mathematics, and Technology Education 1992*. AAAS Publ. #91-38S. AAAS Books, Box 753, Dept. A55, Waldorf, MD 20604. 224 pp + 4 indices. \$12.95 + \$4.00 shipping. A directory of more than 2500 science education and public science programs and organizations and key personnel. (\$10.35 for AAAS members.)

*2061 Today*. Project 2061, AAAS, 1333 H Street, NW, Washington, DC 20005. 6 pp. quarterly newsletter about science education reform. Free?

*Anthro Notes*. A FREE publication from the Smithsonian Institution, Washington, DC 20560. 3/yr. Frequent items on evolution and archaeology. For teachers, especially.

*BSCS: The Natural Selection*, a 10 pp. newsletter. Biannual. FREE from Biological Sciences Curriculum Study, 830 North Tejon St., Suite 405, Colorado Springs, CO 80903. BBS: 719-578-9127. Aimed at teachers with "how-to" resources.

Marine World Foundation. 1991. *Marine Mammals*. Booklet of ideas for teachers of K-3, 4-6, and 7-12 grades. Strongly evolution-oriented. Write Ann Monk, Director of Education, Marine World Africa USA, Marine World Parkway, Vallejo, CA 94589. FREE.

NASA. 1992. *Educational Horizons*. FREE newsletter with synopses of science news from NASA and info about seminars, workshops, and other ways for educators—or anyone—to interact with NASA, receive publications, lesson ideas, etc. Contact Elsie Weigel, Editor, Education Publications Branch, Education Division, NASA, Washington, DC 20546.



# Keeping Tabs

## Dinosaurs and Creationists

John Cole

*Bible-Science Newsletter* is now *Bible-Science News*.

"What about Dinosaurs?" is the lead article in the *B-S News* 30(3). The gist of the article is that dinosaurs fit easily on Noah's Ark because juvenile specimens showed up, two by two (and presumably, not many pairs were needed, since only "kinds" count).

Conspicuously missing is any claim about Paluxy Creek, Texas, dinosaur and human footprints. B-SA has previously championed these claims, long after other creationist publications backed off (without actually admitting defeat, of course) after investigations by serious scholars such as Glen Kuban, Ronnie Hastings, Steve Schaeferman, Laurie Godfrey, and John Cole.

*B-SN* half-heartedly raises some new possible examples of human and dinosaurs living together (allegedly mysterious bone and fossil deposits—noticeably undocumented and tentative). But the new phraseology is extremely (and deservedly) cautious. This less brash approach is welcome, although it does not signal any sea change—deep down, B-SA is still shallow.

Rev. Carl Baugh is still plugging away at Glen Rose, Texas, but his B-SA friends seem to have abandoned or ignored him, as did the Institute for Creation Research several years ago when it clumsily backed off from the John Morris book, *Tracking Those Incredible Dinosaurs . . . and the People Who Knew Them*. A future *Creation/Evolution* article will chronicle Baugh's ongoing but discredited claims. □

## ICR Attacks Asimov

John Cole

The June issue of "Back to Genesis," published by the Institute for Creation Research, is an offensive attack on the late Isaac Asimov. Ken Ham writes in "Asimov Meets His Creator" that Asimov believed in "a religion of death," and as a result he is now burning in Hell. Ham sheds crocodile tears about this but clearly is gloating.

Ham quotes an anonymous letter writer to make his point. "As far as I know, he [Asimov] never

made a profession of faith in our Lord Jesus Christ. As far as I know, he is now experiencing the judgment described by the Lord Jesus. . . ." Ham adds in his own voice that "Asimov read creationist books. He read the Bible. He had ample opportunity to kneel before the Creator and Savior. He refused." Instead, he preached evolution—the "Tree of Death" used by Nazis and communists. Asimov, an emigre Russian Jew, was indeed not a born-again Christian—and certainly not a Nazi!

In the same issue, John Morris accuses astronomers of "willful ignorance and unbelief" for trying to convince each other the Universe began with a "big bang" rather than a recent, divine creation.

Ken Ham has emerged as the ICR's bulldog in recent years, dropping most of the pretense of "creation science" and getting down to hard core evangelism. This should trouble apologists for creationism in the classroom, because it admits that the movement is flatly sectarian rather than "the other side of a scientific debate."

Such fire and brimstone polemics would seem not to be a healthy addition to classrooms. The tone is moralizing, simplistic and gloating. It strikes me as poor theology as well as poor science, although sectarian theology does not belong in the public schools, good or bad. While not surprising, it's rather sad to see minor league pundits strut and try to dance on the graves of others. □

## Orthodox Jews vs. Darwin and Pepsi?

The *Today Show* reported on June 1st that opposition has arisen in Israel to Pepsi Cola billboard advertising which features the familiar tableau of hominoids and hominids marching in a line up to modern *sapiens*—in this case, swigging a Pepsi. Older orthodox Jews are reportedly offended by the ad content because it legitimizes evolution, but Pepsico has apparently declined to remove the billboards for fear of offending the younger and/or nonreligious Israeli majority who take evolution for granted. The incident shows how even whimsical references to evolution can still stir passions in a seemingly modern science-oriented society. □

Asimov is  
now burning  
in Hell?



# Keeping Tabs

## Televangelist Promotes *Of Pandas and People*

Eugenie C. Scott

Televangelist James Dobson's group, "Focus on the Family," is a leading proponent of the religious right agenda. In the summer 1992 issue of his *Citizen* newsletter, Dobson directs his supporters to march down to the school board and demand *Of Pandas and People* be used when evolution is taught. *Pandas*, of course, is a creationist "intelligent design" book intended as a supplement to high school biology courses. It was submitted for state adoption in Idaho and Alabama, and, with NCSE and committee of correspondence help, was rejected in both states (see *Reports*, 11(1):10-11; 10(1):8-10; 10(1):16-18; 9(6):5; 9(2):21).

A source at *People for the American Way*, the first-amendment advocacy organization, tells us that when Dobson's newsletter exhorted its readers to go after the "Impressions" elementary textbook reading series, calls began pouring into PFAW for help. The books were considered "Satanic" and "anti-Christian" by some religious-right proponents. Dobson is reportedly heard on 4000 radio broadcasts each week. If his forces take his bidding seriously, a fresh burst of anti-evolution activity may be right around the corner. (See cover story, this issue.) □

## Burglary Report

David Duke, who ran rather invisibly for the Republican Presidential nomination, *formerly*, he says, was a Ku Klux Klan leader. *Formerly*, he was associated with a white supremacist outfit calling itself the National Association for the Advancement of White People, which he says is a nonracist organization (although their newsletter says it is racist and proud of it).

The NAAWP has in the past spoken up for creationism, so I wrote David to ask his stand on this issue. I have received no reply. However, I *have* just received a letter from "Empire Publishing," the nonprofit, tax-exempt organization which publishes *The Klansman*. They want my financial support, since they think I'm a member of a "threatened race" in this country.

The only logical explanation of my hearing from an organization Duke has disavowed is, of course, that his office has been burglarized and his address database stolen. This would also explain why I haven't heard from him. JRC

## Students for Origins Research Cocoons, Emerges

John Cole

*Currents in Science, Technology, & Society* 1(1), Winter 1992, has arrived; it is the new publication of Students for Origins Research. Its lead article, "Scientific Literacy in America," by Editor Mark Hartwig, echoes many of the points NCSE has raised . . . but it subtly diverges. We all agree that better science education is needed, but Hartwig steers the argument into an attack on the California Science Framework and its supposedly unscientific insistence on the teaching of evolution. While a devil's advocate argument that "The Framework could be improved" is unexceptionable, Hartwig's harumphing is nitpicking; like it or not, evolution is a major tenet of modern science—one of the basic organizing principles of science, in fact.

CSTS 1(1) has 12 slick (meaning shiny, as well as 'professionally-produced') pages. In addition to the lead article, there is an interview with Phillip Johnson, author of *Darwin on Trial*, an article on euthanasia (they're agin it), and a review of Michael Crichton's *Jurassic Park* (they recommend it highly—me, too, but not always for the same reasons).

SOR has become "Access Research Network," a moniker which sounds more value-free. Address: P.O. Box 38069, Colorado Springs, CO 80937-8069. □

## Erasmus Darwin

I. Asimov

*Asimov's Biographical Encyclopedia of Science & Technology*. NY: Doubleday, 1982 (2nd ed.).

[Erasmus Darwin, b. 1731, d. 1802] had the deplorable habit of writing long, didactic poems that had some interest as far as scientific content was concerned but no discernable poetic value. . . . The accomplishment for which he is most famous, however, is his being the grandfather (by his first wife) of Charles Darwin. . . . [In addition he was the grandfather of Sir Francis Galton, a "father" of statistics and, less productively, of eugenics, a dubious topic today, made more so by the fact that genetics was an unknown idea when it had its heyday.]



## Darwin Torches L.A.! (sic)

John Cole

**B**elieve it or not, this was the headline in the *Bible-Science News* I just received (Volume 30, No. 4).

Just when most people were coming around to the fact that Murphy Brown's baby caused the explosion, Paul Bartz reports that it was caused by—Charles Darwin! And the teaching of evolution today, of course. As columnist Dave Barry says, I'm NOT making this up.

(On 28 June, Dave Barry revealed another angle other journalists have missed: namely, that the TV character's baby was born May 18th, *while the riots broke out April 30th*. In other words, perhaps the Los Angeles tragedy caused Ms. Brown's baby?)

The poverty of the Bible-Science Association imagination, the embarrassing lack of sensitivity and "Christian charity" revealed by their opportunistic use of tragedy, is amazing. There is another, gloating note about Isaac Asimov's death. "Charles Darwin's intense hatred of Christianity" is the subject of a long article. (Darwin, in fact, became an agnostic with regret rather

than hostility; Asimov, although not a believer, was an enthusiastic student of religion.)

The *B-S News* also devotes much space to the recent news about evidence for the "Big Bang." They belittle (rather than analyze or debate) the entire argument, unhappy with the implications of further evidence for an ancient Universe. They quote NASA scientist John Mather, who said "This is the Universe God gave us to look at, and we might as well find out what it is and how it works."

The *B-S News* replies that the "Bible offers accurate information about what God is and how He works. *Why bother with research paths that are ruled out by Scripture?*" (my emphasis).

Stridently anti-intellectual, the B-SA seems to be hardening its position on the fringe of the creationist movement after publicly trying to claim a more mainstream position. For example, recent years have seen its founder, Walter Lang, and other stalwarts eased out in favor of ostensibly more moderate and modern personnel. It looks like old times at B-SA, now—more openly an evangelical "ministry" (their term) than ever. □

## Bible-Science Association View of Ecology

Eugenie C. Scott

In the most recent *Bible-Science News*, the editor takes aim at the 1992 Rio de Janeiro Conference on the Environment, accusing its participants of being "eco-doomers" unnecessarily crying wolf. The article assures us that we need not be concerned over the greenhouse effect, the loss of biodiversity, or the general going-to-hell-in-a-handbasket state of planet earth. God will provide. "Yes, extinctions have taken place through history. However, Scripture has honestly told us that the entire creation groans under the burden of sin. Despite the effects of sin, the Lord will not return to a dead Earth. Humankind will be here to greet the Lord." (*B-S News* 30(5):12)

I saw a T-shirt the other day that said, "*Homo sapiens* is not the only species on the planet. It just acts that way." I guess the *B-S News* sees nothing wrong with humankind being the *only* species here to greet the Lord. □

## Mutation Fights Heart Disease

John Cole

A mutation in the A-1 protein has been identified by researchers as an effective "antidote" to the dangers of high cholesterol, according to the *New York Times* (13 Aug.). The mutation is known only in the gene pool of Limone, a long-isolated Italian village.

A modern road reached the mountain village in 1951, but local families are still very inbred. The gene has been identified in 44 individuals, all of whom descend from one couple who were married in the village in 1644. The gene has been isolated and duplicated in the laboratory, and Belgian and Swedish biotech firms are reportedly interested in developing its commercial potential.

Contrary to some folk beliefs, this is further evidence that not all mutations are harmful or lethal. □

~  
"Why  
bother with  
research  
paths that  
are ruled  
out by  
Scripture?"  
~



# Keeping Tabs

## Report from Estonia

Prof. Erast Parmasto  
Institute of Zoology and Botany, Tartu

The situation in Estonia has been changing little by little in the last few months. There has been a prosperity of all possible and impossible versions of religion, astrology, etc. here (as well as in the other non-Islamic parts of the former USSR) caused by a special phenomenon which may be called "inverted taboo." All religious, pseudo-scientific, etc. expressions were once forbidden or in any case not publicly supported by the communist regime. Now, in conditions of "overall freedom," any attempt to say anything against religious fanaticism or pseudoscience or antisience will be loudly condemned as pro-communist!

Happily, in the past year several publications in Estonia by well-known writers have appeared discussing the problem. Also, some acid "discussion" has appeared between different missionaries who are fighting for the right to recruit people to their "only right" version of belief.

Creationism was not popular here until, alas, last year a very well-illustrated creationist book for small children was published in Sweden in the Estonian language. Books for children are rarely printed in Estonia, now. There is no paper, no money. . . . It is a popular, narrative version of Bible stories. I learned from something like it in my first school years 55 years ago. But this book's Forward stresses that every word in the book is undisputable truth, that there is nothing which may be interpreted or understood as metaphorical. Man was *created*.

So we are living in interesting times now. □

## Cults in Eastern Europe

Illustrating the wide range of what should be Viewed With Alarm, "New Kingdoms for the Cults" in *Christianity Today* (13 Jan 1992) reported on "aberrant and unorthodox groups join Christians in filling . . . a spiritual vacuum." They map the inroads of the following alarming groups: Mormons, Christian Science, Unitarians, Zen Buddhists, Hindus, yoga, Bahai, Zoroastrians, Theosophists, Universal Life ("Moonies"), Jehovah's Witnesses,

Hare Krishnas, and Transcendental Meditation, among others. Perhaps we should stress that NCSE is concerned about sectarian inroads in science education but not with sects' life in the temple or ashram! (CT article available from NCSE for SASE + \$1.00.) □

## Is "Creation Science" Blasphemy?

David J. Caplan  
Stroudsburg, PA

Though I am a new member of NCSE, I have read several of your bulletins throughout the past few years. After many talks with fundamentalist Christians, I feel the notion of "creation science" is interesting but actually does a great disservice to the very same Christians who advocate this study. I am surprised that I have never come across this thought in talks with evolution supporters or writings of the NCSE.

When I say "disservice," I mean that the term "creation science" is a term of waste and heresy. As the typical ICR member feels that the Bible is the inerrant and unquestionable word of God, the creation of the Earth and its inhabitants are thus creations of God. The concept of inerrancy is the keystone to their faith and salvation. As scientists, we must question the information we receive in our chosen field of study. Therefore, just as the natural scientist must question nature, so must the "creation scientist" question creation. At least, such research would be a waste of time and effort . . . as they already "know" where we come from and even where we are going. At most, it is high blasphemy due to the concept of Biblical inerrancy.

*Ed: Many creationists agree with you and object to "testing" God. However, "scientific" creationists typically admit that they know the answer and do research to confirm it in the eyes of nonbelievers; they certainly are not interested in disproving any of their hypotheses—negative results just seem to tell them they are asking the wrong questions! They sometimes refer to their research as "witnessing," for example, and call their organizations "ministries." NCSE writers have dealt with this issue from time to time, but we try to avoid "theology" except where it is trying to elbow its way into science classes, books, and labs.* □



## HS Science Journal

John Cole

*The Journal of High School Science Research* began in 1990 as an outlet for papers by students. Its potential is outstanding—millions of young people, the potential sources of papers, could explore issues and questions exciting to all of science.

Subscriptions are \$15 for two issues per year from Applied Educational Technology, PO Box 193, Tigerville, SC 29688. Guidelines for contributors are available from the same address.

One serious quibble with their standards is that, while I certainly agree that such things as grammar and spelling are very important, I am surprised to see that review criteria are designed to exclude papers so energetically, apparently independent of scientific merit.

Rules such as the following strike me as counterproductive—an exaltation of form over substance: "A paper will not be considered for publication if it contains any of the following errors: 3 or more misspelled words; Unacceptable grammar, punctuation, etc.; Written in 1st person; No biblio. . .", etc. Item 10 is "Topic too advanced for JHSSR." Item 11, "Does not follow author guidelines"—is a catch-22, it seems to me.

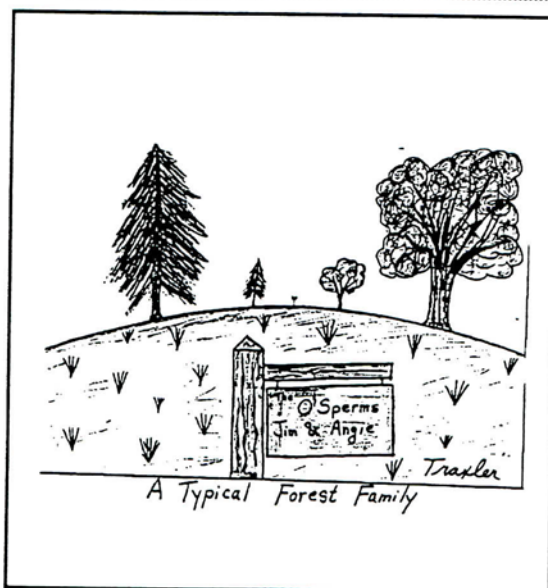
This is a wonderful idea which needs support and work to improve it. (We'll have info about other such projects in future issues.) □

## Two Science Teacher Grant Programs

The US Department of Energy (DOE) offers more than 300 research appointments each year to science and math teachers in grades 7 through 12. Research takes place at 25 DOE labs around the US. There is a stipend of \$550 per week for eight weeks, a housing allowance of up to \$1000, and travel allowances. In some cases, graduate college credits are available (and teachers may work out other arrangements with home districts re: in-service training credits and so forth). Up to \$200 in graduate tuition fees is available.

For further info and applications for the 1993 "Teacher Research Associates" (TRAC) program, write DOE, TRAC, Associated Western Universities, 4190 South Highland Drive, Suite 211, Salt Lake City, NV 84124. Completed applications must be received each year by the fourth Friday in October.

A Tandy Corp. program offers awards to 100 teachers and 100 high school students. As "Tandy Technology Scholars," teachers receive \$2500 and students receive \$1000 scholarships. In addition, the top 2% of high school students from participating schools are honored with certificates for their performance in grades 9, 10, and 11. For more information, write Tandy Technology Scholars, PO Box 32897, Texas Christian University Station, Fort Worth, TX 76129. (817) 924-4087. □



## Quotables

If we choose to let conjecture run wild, then animals, our fellow brethren in pain, disease, suffering and famine—our slaves in the most laborious works, our companions in our amusements—they may partake of our origin in one common ancestor—we may be all melted together.

Charles Darwin at age 28

Don't set out to teach theism from natural history. . . . You spoil both.

Ralph Waldo Emerson, 1857



## Committees of Correspondence Revival, Birth

Eugenie C. Scott

The New York Council for Evolution Education is once again producing a newsletter. The spring, 1992 issue discussed, among other topics, "Creationism Is Alive in Buffalo" regarding the attempts of two school board members to give "equal time" to creationism. You can subscribe for \$10 to NYCEE, 23 Chelsea Drive, Syosset, NY 11791.

On the other side of the country, in California, the Bay Area Committee of Correspondence for

Science, issued its farewell issue of *BACC-Science* during the early summer of 1992. The northern California group had been virtually inactive for over a year. A new group of southern Californians, however, under the leadership of NCSE member Robert Salomon, has arisen to take its place, and has formed the "California Committee of Correspondence." To subscribe to their newsletter, *The Committee*, send \$5 to NCSE (CCC), Box 9477, Berkeley, CA, 94709-9477.

### Complete Your Back-Issue Collection of *Creation/Evolution*

All 29 issues are still in print (or reprinted) and available from NCSE. Articles cover the major areas of controversy between scientists and creationists—in science, education, law, religion and culture. New subscribers often order entire back-issue sets—at a discount.

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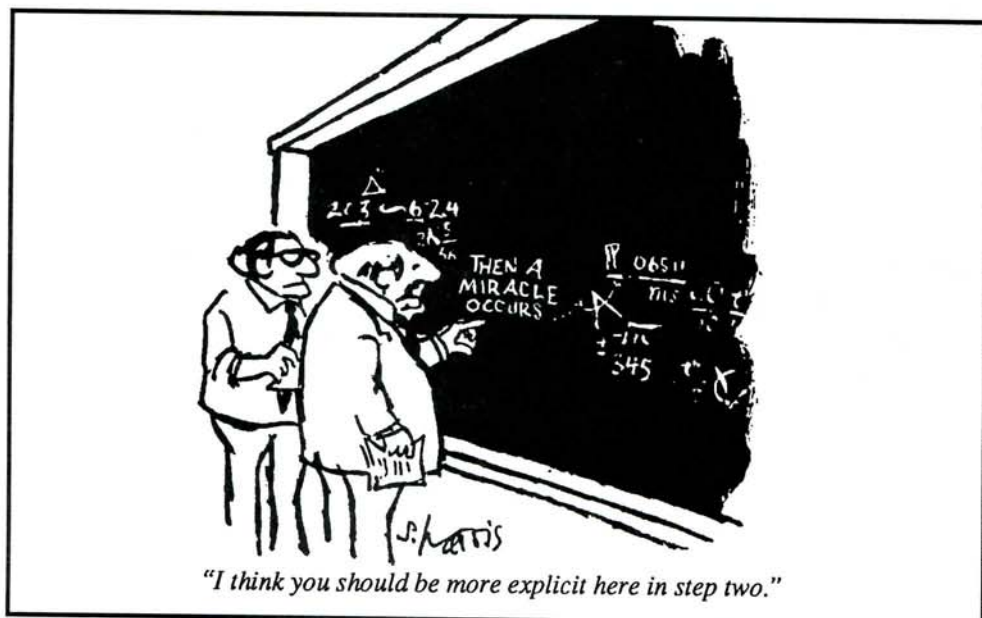
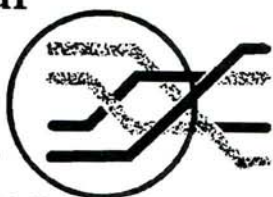
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## Sidney Harris Cartoon Book

Reviewed by John Cole

Sidney Harris is the cartoonist-laureate of science. Some of his cartoons such as the one on this page are so well-known that many people allude to it in professional papers or talks without even having to show it. *Chalk Up Another One: The Best of Sidney Harris*, has just been published by the American Association for the Advancement of Science. 146 8" x 8" pages of cartoons plus a brief forward by AAAS President Leon M. Lederman make this paperback an excellent Holiday gift for the scientist, physician, or science or math teacher on your shopping list. (It costs \$10.95 at bookstores or from the publisher, AAAS Press; add \$4.00 shipping per order from AAAS—and the price for AAAS members is \$8.75 + shipping.)

Some Harris cartoons are a bit esoteric. He assumes readers know a fair

Cartoons, continued on p. 3

## Creationists Target Local Offices, Committees

### "Stealth Politics"

John Cole

According to Christian Coalition leader Ralph Reed, "The real battles of concern to Christians are in neighborhoods, school boards, city councils and state legislators" (*Wall Street Journal* 5/11/1992).

The new Washington state Republican Party platform calls for "Bible reading, creationism and corporal punishment in the schools," a ban on all abortions, and abolition of the National Endowment for the Arts, according to the *New York Times* (27/10/1992). Also, if Washington state's GOP has its way, the Panama Canal would be reclaimed—along with the gold standard for currency.

A San Diego school board candidates' meeting turned tense and confrontational in 1992 when some candidates' agendas were discussed: school prayer, creationism, library and textbook censorship, and public financing of Christian schools. A new school board member denounced school breakfast programs for poor children because they were an attack on "family values."

In a segment broadcast on the 29 October *MacNeil-Lehrer Report* on PBS, retired entertainer Pat Boone told a California rally that some people get excited about "separation of church and state as if it were in the

Stealth, continued on p. 3

## Contents

Editor's Desk	2
Letters	3
News	5
NCSE News	8
Tracking Those Incredible Creationists	14
Resources	16
Keeping Tabs	19
Science Ed	21



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John R. Cole

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“You folks are doing great!” This is one of the most depressing cheers I hear far too often. We aren’t “*you folks*,” or at least we shouldn’t be.

Perhaps the most common reaction to NCSE I hear is that people are extremely grateful: “Your article on (X) really convinced my schoolboard—It’s really lucky I got a Xerox copy!” This quotation is a composite of a lot of responses, but it’s deadly accurate. I hear a lot about “the good work *you’re* doing” and that publications are being passed around or photocopied for students or school boards or whatever.

We just want and need people to pay for subscriptions and, perhaps, contribute some money to help us answer phones and fire calls. If we’ve helped save your job or helped you improve your kids’ textbooks or schoolrooms, lend *us* a hand! And help us recruit support, since most readers of this tirade are probably members, already!

It’s good news to hear that we have some use. On the other hand, it is depressing as hell to hear that we are taken for granted and don’t need financial support! This applies to contributors of articles, as well—Many of them (you?) submit articles without subscribing. All articles are welcome, because we need information, but it is very frustrating to hear, “Send me copies if you print this, since I don’t subscribe.”

There is no magical reserve of cash tiding us over, no endowment, no kitty available to finance a multi-year project to “go forth and do good.”

To change the topic a bit, before I sound too much like a televangelist: “Evolution” is not on any ballot, to my knowledge. However, as reported in this issue, some states’ Republican parties have been largely taken over by various Religious Right groups such as the Christian Coalition—much to the consternation of most Republicans who are surprised to learn that their party suddenly attacks evolution. Only four Congressional candidates were launched specifically by the Christian Coalition, and all four lost. However, a number of incumbents are strongly supported by the Robertson group.

NCSE is non-partisan and non-political, by definition. It advocates good science education and endorses skeptical, critical analyses of scientific claims as healthy opposites to docile agreement with orthodox details or the assumption that, “If it’s in print it must be true.” We don’t endorse candidates for office.

Meanwhile, “Welcome,” new members! An impressive number of new subscribers join NCSE with this issue, and I hope you (they) feel at home. I hope to hear from you with suggestions, complaints, manuscripts, or whatever. Even applause! The extent of popular antievolutionism may be manipulated by pollsters or the press, but it is a growing phenomenon in the US. We try to keep readers up to date, but we depend upon you for information.

Finally, another note on mailbox issues. Comments on NCSE publications or articles are appreciated and passed on to authors if they can’t be published. Some articles and letters submitted debate theological issues or even attack religion, *per se*, but I should note that these topics are simply not the purview of NCSE.

John Cole



# Letters

## An Asimov Reply to Creationists

I note in NCSE Reports 12(2) that one of the more unpleasant members of our Australian creationist fraternity, one Ken Ham, chose to gloat over the recent death of Isaac Asimov. A similarly nasty article by Ham also appeared in the "Prayer News" of the organisation to which Ham belongs, the Queensland-based Creation Science Foundation. In the circumstances I feel it only appropriate that Asimov should have the last (appropriate) comment on this issue.

Some years ago I wrote to Dr. Asimov re: the inclusion

of a film clip which showed him explaining the 2nd Law of Thermodynamics. It was in the first of a series of 6 creationist films (Origins Series) shown widely around Australia. As edited into the film the Asimov clip left a clear impression that evolution was against the 2nd Law.

Asimov's reply (13 January 1987) was beautifully succinct:

*"Dear Dr. Ritchie,  
I don't think I can fight this profitably at a distance of 10,000 miles. I imagine they've quoted me accurately but out of context and into the wrong context."*

*"My satisfaction is that if the afterlife is as I think it is, none of them will go to heaven because it doesn't exist."*

*"On the other hand, if afterlife is as they think it is then they will go to hell for the sins of lying and hypocrisy."*

Dr. Alex Ritchie  
Paleontologist,  
Australian Museum  
Sydney



**Humanist  
Fundamentalism?**  
I really savor your Reports and  
Creation/Evolution. Keep up

the good work! But, don't neglect the fact that secular humanists, like the late Isaac Asimov, had fundamentalistic prejudices as blatant as the religious fundamentalists'. For many of these people, all religions are false and superstitious. I find many of these people extremely superficial, and Asimov was no exception. When asked on a TV debate on creationism why he did not believe in religion, his profound answer was, "I do not believe in thumbscrews!" Wow!

Joseph D. Ciparick  
New York, NY

## Stealth *continued from p. 1*

Bible." He held up a Bible and said, "Well, it's not!"

Creationists are targeting school boards, town and county offices and committees, and sometimes more nationally visible offices. Most often, they are doing this via activism in Republican Party politics. Four of their candidates lost 1992 bids for Congress after capturing Republican nominations. According to National Public Radio, of the 600 local candidates sponsored by the Christian Coalition, 40% won in November using a network of precinct captains and local churches.

The Republican Party has been especially targeted by religious conservatives, to the discomfort of Republicans who disagree with their efforts to legislate a particular view of personal faith and morality. The 1992 Republican National Convention reportedly offended many people with its focus on a narrow "family values" definition, and commentators asked, "How could this happen?" But the national production was simply a more visible tip of the iceberg of dogged organizing, volunteering for committees, and doing the other grunt work of politics. More than 300 GOP delegates were reportedly Christian Coalition members.

There are other examples in the news recently—and sometimes out of the news.

Alaska, Iowa, and other states' GOP machinery have also been quietly infiltrated by this new Religious Right. (See related articles on Iowa and Florida, pp. 4 and 5)

The Christian Coalition, televangelist Pat Robertson's self-styled grass-roots organization boasts 350,000 members and 42 state organizations. They coordinate literature and information distribution to another 100 organizations, according to *The Christian Century* magazine (9–16 September 1992). They send a Voter's Guide to 135,000 churches, nationally. In California they recently distributed 500,000 Voter's Guides before the June Republican Primary. Networking with other Religious Right groups, the Coalition helped elect "hundreds of candidates," according to the magazine. For the November election they distributed 50 million voters guides, including 30 million given out in churches around the country.

In San Diego County, the Religious Right elected 60 of 88 members to various local offices in 1990. The victors were part of the "Pro-Family Candidates List." Many won by refusing any public interviews while organizing strenuous get-out-the-vote campaigns in conservative Protestant churches. While Jay

*Stealth, continued on p. 17*

## Cartoons *continued from p. 1*

amount of science and science history. The humor is highly intellectual, and even the well-read scholar may occasionally miss a point or two. Garfield it's not, with punch lines like, "I think, therefore I'm paid" or "My big mistake was going into cosmology for the money."

The cartoons included originally appeared in *American Scientist*, *Wall Street Journal* and various medical journals. □



# Textbook Runs Afoul of Cal School Board

Eugenie C. Scott

~  
“If parents want their children to know about [evolution], they should teach them at home.”  
~

Headlines in the *San Bernadino Sun*, 6/21/92, questioned, “Textbook case in ‘dumbing down’?” The good news was that Hesperia, CA, had decided that all 10th graders should take biology. The bad news was that the middle-of-the-road textbook in use, Holt, Rinehart and Winston’s *Modern Biology*, was considered “too difficult,” and a committee of teachers were instructed to select one that would meet the needs of all the students.

The very bad news is that when the teachers did select a textbook, Holt’s *Biology Today*, some school board members vigorously rejected it. Why? The *Victorville Daily Press* reported that some school board members felt the book was inappropriate “because its chapter on evolution presents the concept as fact rather than theory” (6/10/92, “Board Rejects Biology Textbook”).

The California Science Framework, the document that directs K-12 curricula in the state, as well as directing publishers on content of their books, clearly states that evolution is a fact as well as a theory. The meaning of the CSF is clear:

*Evolution is the central organizing theory of biology and has fundamental importance in other sciences as well. . . . Just as scientists observe the fact that apples fall and devised the theory of gravitation to explain the fall, scientists observe the fact that animals and plants change over time. They constructed the theory of evolution to explain how these changes occurred (p. 22–23). . . . The unifying theory of biology is evolution; as Theodosius Dobzhansky said, noting in biology makes sense without it. It is accepted scientific fact, and has been since the mid-1800’s, that organisms are descended with modification from other organisms. (p. 126)*

But not in Hesperia. “Most members of the Hesperia Unified School District Board of Trustees don’t believe evolution correctly explains how there came to be a variety of species on earth.”

“Trustee Lori Nielsen said she could accept no book that mentions evolution. ‘If parents want their children to know about this, they should teach them at home,’ she said.”

Although the *Victorville Daily Press* announced that the book had been rejected, the article was in error. The school board actually ended up approving the offending book, but not because teachers or community members pressed for the inclusion of evolution. Arguments instead were made that the book should be adopted because it had lots of “extras” that teachers sought: Spanish-language tapes, limited-English proficiency materials, and because it was easy to read. □

## Update on Lake County, FL

After the September, 1992 primary elections, the headline in the *Orlando Sentinel* cried, “A lot of winners can thank religious right” (9/3/92, p. B1). Of the 27 central Florida candidates running with Religious Right backing, 22 won, including two new members of the Lake County school board, who defeated incumbents. This gives Religious Right candidates a 3–2 majority on the five person board. Newly-elected board member Claudia Ramsey’s plank stated that because “humanism, which she defines as a religion in which humans control their own destiny, is taught in the schools, creationism should get equal time,” reports the *Sentinel*. Citizens of the area are recommended to follow school board meetings closely.

Lake County, FL, was the site of a divisive creationism controversy at the school board level in 1991 (see *Reports* 11(2):1; 11(3):10). At that time, a new school board member, elected with support of local fundamentalist churches, proposed introducing creationism “if evolution were to be taught.” Other school board members voted her down, after lengthy public discussion. Correspondent Glen P. Goffin wrote to bring us up to date on the Florida situation. [ECS]



## More from South Africa

Tom O'Neill  
CASME  
Congella, South Africa

I recently came across a copy of *Reports* on our library shelves. I work at the Centre for the Advancement of Science and Math Education, an agency which works towards improving science and math education in disadvantaged schools in our region.

I was enthralled. I had been completely unaware that a serious Creationist menace remained even in the education systems of more affluent countries such as the US. My explanations for how it had lingered on for so long here needed revision. I had presumed that creationism was just one more of the ugly dinosaurs (nineteenth century views on gender issues, sabbath, corporal punishment, etc.) that had managed to survive unnoticed in the enormous shadow of the apartheid monster.

Evolutionary theory is not taught in the schools here. Our present curricula for all racially delineated education departments has been determined primarily by the ruling Afrikaners. Their tradition being a staunchly Calvinist one, it was probably inevitable that unapologetic Creationism (until recently without even the need for a "scientific" dressing) would dominate. Incidentally, the State broadcasting system has been tightly controlled by the same people (to powerful political effect) with the side-effect that [public] access to scientific knowledge was also controlled. Although the views allowed on TV have broadened a little recently, the extent of the mind-set we deal with is indicated by the reputed editing of the word "evolution" from an SABC program dealing with the development of the computer.

Sadly for South Africa, I'm not sure that a broadening of outlook is inevitable with change. While the Calvinists will undoubtedly lose some social power, there are many others who will now argue that evolutionary theory is heresy. Firstly, the great majority of African people here are Christian, and many of the churches with which they are affiliated are fundamentalist. (Fundamentalist and born-again faiths are growing explosively amongst black and white in our current turbulent climate.) Additionally, many less devout Africans are very wary of evolution, foreseeing in it another mechanism by which they can be stripped of their humanity. They

are having enough problems with disclaiming Ham as their progenitor! Add to this the until-now-subdued views of Islamic South Africans whose religious beliefs also [may seem to] require them to vigorously oppose scientific theories of human origins in favour of creationism. □

## Creationism Instruction Mandated by Iowa GOP

As reported in the *Los Angeles Times*, the Republican Party of Iowa adopted a platform in 1992 which would require schools to teach "creation science."

Many Iowa Republicans are appalled, according to the *Times*, but this is only one of a number of radical demands made by the new platform after an effective takeover of the party structure by members of Pat Robertson's Christian Coalition. Other goals include abolishing OSHA (the Occupational Safety and Health Administration), capping AIDS education spending and research, ending all gun control, abolishing the National Endowment for the Arts, and reinstating corporal punishment in public schools. Syndicated columnist Molly Ivins reports that a plank calling for the legalization of filing attack dog fangs to sharpen them was defeated, however.

A letter to Iowans from Robertson calls supporters of Iowa's proposed Equal Rights Amendment (on the ballot this Fall) a "socialist, anti-family political movement that encourages women to leave their husbands, kill their children, practice witchcraft, destroy capitalism and become lesbians."

A fair number of Iowa Republicans are ERA supporters, and others who may not be supporters of the ERA support evolution education, and oppose bigotry. They seem to be left out of the Robertson Christian Coalition and state platform equation, and they resent it.

The "Religious Right" is adept at packaging large agendas designed to add diverse constituencies into an apparent monolith. People who embrace one aspect of their agenda may disagree with all or part of the rest of it, yet they find themselves listed as members of a coalition, a "Moral Majority," etc. when they endorse only one corner or another of the platform. In this way, all Biblical literalists are often painted into a corner as implicit supporters of a broad political agenda, even though many are staunch opponents of religious intrusion into government or public schools and perhaps other aspects of the supposed coalition. □

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shadow of  
the  
apartheid  
monster.

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## Televangelist Dobson Slams California Framework— But Promotes NCSE!

Eugenie C. Scott

Televangelist James Dobson publishes a magazine called *Focus on the Family Citizen* (see *Reports* 12(2):18). In the September 21, 1992 issue, staff editors strongly criticize the California Science Framework. "California is leading the charge to silence critics of Darwinian evolution in public school classrooms," trumpets the subhead. Familiar creationist critics (Kelly Segraves, Mark Hartwig, David Llewellyn) are quoted, and disparaging remarks are made about NCSE members Lawrence Lerner, Kevin Padian, and Thomas Jukes.

Segraves is quoted as saying, "The new science framework is now a law that requires evolution to be taught as a fact—and requires Christian students to accept it as such, without any recourse. . . . Now they're going to be tested, graded and judged on how well they accept the 'fact' of evolution." (Actually, the California Science Framework states clearly that the purpose of education is to encourage understanding, not to compel belief. Students who do not accept evolution are free to do so: but they must learn about it if they are going to pass courses in California science classes.)

In attacking the "error-ridden" Framework for having published a table of molecular distances with several errors, *Citizen* editors unwittingly also cast aspersions on creationist scholarship. The table in question, on p. 117 of the Framework, indeed does contain errors. Original data on molecular comparisons had been published by Dayhoff, and portions of the data had been reprinted in the creationist textbook, *Of Pandas and People*. The authors of the Framework deliberately used Dayhoff's data as reproduced in *Pandas* because many teachers had already seen the creationist book, and Framework authors sought to present the data in a familiar form. Kevin Padian, one of the Framework authors, commented, "We thought the creationists could at least copy numbers correctly. I guess they can't."

This is perhaps a lesson for us all: knowing the quality of creationist scholarship, never use them as secondary sources for published data!

In a sidebar on p. 6, readers of *Citizen* are encouraged to write the President of the State Board of Education to protest the Science Framework. "To

find out what's being taught at the classroom level, ask a local school teacher or principal," readers are further admonished. As the goal of the scientific creationists is to rid the schools of evolution, this approach shows great promise. Many teachers have simply ceased teaching evolution at the very hint of controversy, such as when a concerned parent "asks a local school teacher or principal" about the teaching of evolution.

NCSE is recommended in the sidebar as "the best source of information" on anti-creationist activities around the country. They kindly present our address and membership fees, for which we thank them. We've even added a few new members from his "promotion!" □

### Should Barbie Dolls Hate Math?

A new version of the famous Barbie Doll talks. Unfortunately, until October, 1992, some of what Mattel, Inc.'s new \$25 "Teen Talk Barbie" had to say was terrible.

"Math class is tough."

The doll has a computer chip which randomly chooses four phrases out of 270, presumably typical of what young teenagers can relate to. Each doll has about a 1.5% chance of including this phrase.

Barbie came out against math in the summer of 1992, and the American Association of University Women and math organizations launched a protest campaign, pointing out that Barbie contributes to a stereotype that girls can't do math. AAUW also noted that the new Barbie could exacerbate the degree to which teachers and schools already typically short-change girls by discouraging their interest in mathematics.

Mattel has agreed to cut Barbie's 270 phrases down to 269, eliminating the offending words. The company also offers a free swap to anyone who wants to exchange a doll purchased before the editing of the chip. Mattel apologized and its spokeswoman added that she was not previously aware of studies showing prejudice against girls in math classes. [JRC]

Knowing  
the quality  
of  
creationist  
scholarship,  
never use  
them as  
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data!



## Boston AAAS Meeting Focuses on Science and Religion

"Science and Religion: Examining Both" will be a major section of the program at the Annual Meeting of the American Association for the Advancement of Science in Boston, 11-16 February 1993. "What Is Life? Origin and Evolution" is one symposium. That panel will be led by Cyril Ponnampertuma and Lynn Margulis.

"Scientific Resources for a Global Religious Myth" will be chaired by Loyal D. Rue and Ursula Goodenough. "The Religious Significance of Big Bang Cosmology" will be led by theologian and physicist Robert John Russell. "Oil and Water? Institutional Interactions Between Science and Religion" will be chaired by James B. Miller, United Campus Ministry, Pittsburgh.

Other symposia of special interest to NCSE include "The End of Eve? Fossil Evidence from Africa," organized by anthropologist Milford Wolpoff (never a fan of "African Eve!"), "Models of Biocultural Evolution: Understanding Human Social and Moral Development," and "Evolution Medicine: New Directions and Perspectives."

Sessions on "Improving Formal Science Education" will include: "International Comparative Test Scores . . . in Selected Countries;" "History and Philosophy of Science as Aids to Science Teaching;" "Women in Science, Education and Mathematics;" and "Technology for Special Needs on Campus."

A full-day series of symposia on Saturday, 13 February, will focus on science education, including an NCSE session on "The New Antievolutionism" as one of six specialized symposia (see, NCSE at AAAS, p. 8). Related sessions include a plenary session on "Science and Mathematics Education Reform" chaired by Jon D. Miller and symposia on "Project 2061," "Designing a Science Curriculum for Middle School Students," and "Biological Science in the Public Domain," chaired by NCSE Supporter Michael Ruse.

The AAAS Meeting is open to members or others who register and pay the fee; single-day rates are available, as well, and sometimes people attend even if they cannot afford the fees. Members of the press are admitted free if they arrange it in advance. □

## Rhode Island Park Buckles to Creationist Pressure

Just one single creationist managed to disrupt the advertising for a 1992 public park exhibit in Rhode Island, as reported by the *Providence Journal-Bulletin* (9 July 1992). Roger Williams Park Zoo hosted a display of animated dinosaur reconstructions this summer (1992). One of the ads for this attraction was a billboard on Route 195 which featured a Pteranodon lurking over the slogan, "Thank God for Evolution." The ad campaign angered creationists, and one of them, Erik P. Thorpe, took the protest to its limits and finally caused the park to paint over the offending text and then the rest of the ad.

Thorpe claimed the billboard was "a slap in the face to every Christian who sees it, and it should be removed immediately, unless that is its purpose." Others objected, too, but Thorpe was the only one who pressed the matter. "I thought that it's blasphemy," he said. The theory of evolution is "filth."

Roger Williams founded the colony of Rhode Island as a haven for people who disagreed with state religion and wanted to live free of state interference with religious beliefs. [JRC]

~  
The theory  
of evolution  
is "filth."  
~

## Barbara McClintock Dies

Barbara McClintock, one of America's preeminent genetics researchers and a Nobel Prize winner, died September 3rd. She was 90 years old and active in research at the time of her death. Dr. James Watson, co-discoverer of DNA, compared the significance of her work with that of Gregor Mendel. She discovered the fluid nature of genetic material nearly forty years before her 1983 Nobel—when she was the first woman to win an unshared prize in Physiology and Medicine.

Born in 1902, Dr. McClintock earned her Ph.D. in 1927 and actively conducted research at Cold Spring Harbor from 1941 until her death. Like scientists of an earlier era, she worked basically alone, without phalanxes of students or post-docs, contrary to modern trends. Her research on transposable DNA fragments was long considered at odds with Darwinian evolution until the advent of molecular biology in the 1970s vindicated her analyses and results. At her death, she was a MacArthur Fellow and the oldest recipient of that honor.



## NCSE at AAAS in February

Eugenie C. Scott

On Saturday, February 13, 1993, NCSE will present its symposium, "The New Antievolutionism" at the American Association for the Advancement of Science annual meetings in Boston, MA. The session will consider the "evolution" of scientific and other creationisms since the *Edwards v Aguillard* Supreme Court decision of 1987. Speakers include Dr. William Thwaites, speaking on *Abrupt Appearance Theory*; Kenneth Miller on *Intelligent Design Theory*; Jonathan Marks and Laurie Godfrey, *Non-Darwinism and Anti-Evolution*; Michael Ruse, *Non-literalist anti-evolution: the case of Phillip Johnson*; and Howard Van Till, *Antievolutionism as a reaction to scientism*. We will endeavor to have audiotapes of the session available to NCSE members.

Our symposium is one of the six sessions on issues in science education, the featured "theme" of this AAAS Meeting. □

## How Active Should NCSE Be in Other Countries? Should We Subsidize Subscriptions?

Member/Subscribers outside the United States are important to NCSE, but the combination of postal regulations and currency exchange details can make "foreign" membership difficult. Yet our information is needed by educators around the world.

Some obstacles to foreign membership may seem obvious—the expense of even \$28–\$34 is hard to bear in many countries, for example. Banking rules add to the problem. Most US banks flatly refuse payment in foreign currencies, and others charge incredible fees such as my own bank's \$25+ fee for any Canadian Cheque deposit! A parochial US bank attitude thus adds to the problems faced by NCSE (and any "exporter" on the small scale, for that matter), above and beyond the possibly high cost to a potential low-wage subscriber in another country.

Add to this the high cost of foreign postage (no Bulk Rate, even to Canada or Mexico, and higher First Class and other rates, even surface mail rates). A US letter which costs \$0.29 costs \$0.40 per ounce to Canada or Mexico and \$0.50 per half ounce to other countries.

Creationist missionaries are very active in Third World countries, as is fairly well-known, although

the extent to which explicitly "scientific creationist" missionaries are involved is less well known. In too many countries, antievolutionists are able to stock school and college libraries with "free" books when the thirst for ANY books is often desperate.

In newly independent countries in Eastern Europe, evangelical creationists are extremely active. Long-starved for religious freedom, people welcome all sorts of religious propaganda. We can welcome their religious freedom without conceding the field to "scientific" creationism, I hope, but NCSE and its friends in these countries need help.

We charge "foreign" subscribers \$28 (\$34 for air mail subscriptions), but that is already a subsidized rate. And worse, in many countries, this is an impossibly high cost. In the former Soviet Union, for example, this is almost double the monthly salary of many research scientists. In countries where typing paper (let alone computers or printers or computer paper) is virtually inaccessible, scientific research is incredibly difficult, and this dilemma is most common in Third World countries (countries often richest in the biodiversity so important for evolutionists to study—and facing some of the most pressing problems of habitat devastation and the resultant extinction of species).

In Hungary or Poland or Tanzania or Estonia science education could well be ceded to forces opposed to good science but able to offer schools and libraries "free" textbooks and references. Perhaps we can write off the intellectual input of the vast majority of humanity, but somehow this strikes me as profoundly stupid, ethnocentric and racist—wasteful of human resources and our concomitant ability to affect our planet and perhaps others ones.

Can we target audiences who need us? And if so, how do we pay for it? [JRC]

## Welcome New Members

During summer and fall of 1992, NCSE acquired close to 200 new members from the American Association of Physical Anthropologists, the Society for the Study of Evolution, the Paleontological Society, the Society for Vertebrate Paleontology, and the American Society of Naturalists. We welcome these scientists, and look forward to using their expertise to defend the integrity of science education. [ECS]

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Anti-evolutionists are able to stock school and college libraries with "free" books when the thirst for ANY books is often desperate.  
~



## California Textbook League

With foundation support, NCSE published a regular series of textbook reviews. Paid circulation was always low, and with the completion of last year's volume, *Bookwatch Reviews* suspended publication. This decision coincided with the end of a logical cycle of reviews of textbooks currently being used by public schools; new editions are in preparation for adoption in coming years, and NCSE will continue to work with publishers, advising on science content and helping them upgrade their "products." (Modern textbooks are products; many no longer even have authors' names on their covers!)

The California Textbook League, led by prominent textbook critic William J. Bennetta, continues to publish a bulletin dealing with all sorts of textbooks—not just science. For information, write the league at P.O. Box 51, Sausalito, CA 94966. □

## Computer Bulletin Board

**PHONE NUMBER CORRECTION:** To call the NCSE-FREENET computer bulletin board use the number (216) 368-3888. The number published in our last issue was the number used in Cleveland, apparently, but not the "outside" number.

Page Stephens, one of the FREENET poobahs and long-time NCSE-er, has called to alert us to the problem which neither he nor I had checked out when I published Jim Kutz's article in the last issue (*Reports* 12(2)). Stephens reports that callers trying the advertised phone number should, by now, be transferred to the correct one or at least advised of the problem instantly.

Meanwhile, the BBS is up and running, and access via other network system remains the same.

Sorry about any confusion.  
Again: The correct phone number is:

**(216) 368-3888**

Spread the word if you're a computer jockey!

## Robert S. Dietz Honored

*Eugenie C. Scott*

NCSE Supporter Dr. Robert S. Dietz was the recipient of the 1992 Liberal Arts and Sciences Alumni Achievement Award presented by the University of Illinois at Champaign-Urbana. Dietz, a regular contributor to *NCSE Reports*, was honored for his contributions to geology.

To quote the Illinois LAS Fall 1992 newsletter,

*Going against dogma, Dietz played a leading role in two of the most important developments in the earth sciences during his lifetime: the establishment of plate tectonics as a new paradigm and the recognition of the importance of meteoric impacts on Earth and on the terrestrial planets. Dietz was the first scientist to propose that the crust of the earth consists of a series of horizontally-moving plates driven by a process of "sea floor spreading" at mid-oceanic ridges. . . . Dietz withstood attacks on a second theory he proposed initially as an undergraduate: that the surface of Earth and other planets are sculptured by meteorite impacts. His later work confirmed the theory, making him the founder of modern astrogeology. . . . One colleague writes of Dietz, "Many of his ideas have been called highly controversial, but as far as I am aware, he has been almost invariably proven right by later works." Another writes, "His hypotheses involving astrophysics and other mind-stretching concepts have caused geologists and geophysicists throughout the world to consider their own hypotheses and to consider alternative views as to the origin of many of the major features of our earth."*

Congratulations, Bob, on a well-deserved honor. □

Figure on p. 16 is the cover of *The Skeptic* 1(1), © 1992 Pat Linse. The issue includes Asimov tributes by Harlan Ellison, Steve Allen, and Martin Gardner.

\$30/yr.  
2761 N. Marengo Ave.,  
Altadena, CA 91001.

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the first  
scientist to  
propose that  
the crust of  
the earth  
consists of  
a series of  
horizontally-  
moving  
plates  
driven by a  
process of  
"sea floor  
spreading"  
at  
mid-oceanic  
ridges.  
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## "Where Have All the Creationists Gone? Onto Your Local School Board"—Friedman Speaks at NSTA

Despite a wide-spread public belief that creationism disappeared as a problem when the Supreme Court killed a Louisiana "equal time law" in 1987, the focus has simply changed from state or national legislation to the local level. School boards, local governments, and individual schools and teachers are now the targets. Even local pulpits may be besieged. While NCSE members have kept up to date on this, most scientists and teachers have tended to think the matter settled in favor of evolution—until their own schools or children are targeted.

This is the message Jack Friedman, NCSE co-founder and former president, delivers this Fall at the November national meeting of the National Science Teachers Association and an earlier New York State Science Teachers Association meeting. Friedman says that "People are optimistic. I am. I'd like to think that a bit of concerted effort has solved this problem. But the problem continues, and it is probably even worse now that it's out of the national media eye."

Friedman says, "I retired a while ago from high school teaching but not from science education. I've worked on the Committees of Correspondence project and the NCSE. It's crazy to have to speak to people about anti-evolutionism, in 1992. Even worse, a typical audience member will conclude that I'm some sort of nut. But then teachers in the audience stand up and tell me it's worse than I claim! Other people in the audience are shocked. Then someone stands up to denounce evil evolutionism, and a few more people find out this isn't the dead issue everyone hopes it is. I wonder what I'll do when there are no creationists in my audience—I'm getting to count on them to make my point!"

Friedman also attended the Nassau County (NY) Science Supervisors Association Conference "disguised as a vendor in their science materials exhibit area." All the NCSE materials disappeared quickly. "Next time I'll bring twice as many," Friedman says. "Science supervisors on Long Island are beginning to feel the beginnings of creationist pressures, I think." [JRC]

~  
Because evolution is not a religion, it doesn't generate the same fervor as creationism does  
~

## Scott, Hastings, Godfrey and Cole on the Road

NCSE Executive Director Eugenie Scott chaired a Fall symposium, "Multicultural Approaches to Science: The Good, the Bad, and the Ugly," at the annual CSICOP Conference. That meeting in Dallas also featured a field trip to the nearby Paluxy Creek area led by Board Member Ronnie Hastings. Hastings and other NCSE-ers have been active in debunking creationist claims to have found human tracks alongside dinosaur footprints along the Paluxy. The dinosaur tracks are real.

In April, Dr. Scott debated Phillip Johnson, author of *Darwin on Trial*, at the Southwest Anthropology Association annual meeting in Berkeley, CA, where NCSE member Jonathan Karpf also spoke. (See next issue for details.) Also that month, She spoke before the Bay Area Skeptics, and in May, at an East Bay Skeptics meeting. June took her to the Pacific Division of the American Association for the Advancement of Science meetings, where she and NCSE member William Thwaites presented a workshop on scientific creationism at the college level. Thwaites, role-playing a creationist professor, delighted (and frustrated) the audience, which was hard-put to cope with his genial, reasonable-sound-

ing arguments for why his academic freedom should permit his teaching of pseudoscience.

July brought Scott to a group of western states science teachers attending an NSF-sponsored short course on coping with creationism in the classroom. In late August, She traveled to Santa Monica College to present the keynote address for the faculty Staff Development Conference, where her presentation was especially well-received.

On September 15, Scott appeared on the Ed Wilson radio show, broadcast from Columbus, Georgia. NCSE member Terrell Stewart managed to call in and asked a good question on this talk show. In October, Scott and two fellow Californian NCSE members presented a three-part workshop to an overflowing room of California Science Teachers Association annual meeting attendees. In November, Scott will present a workshop with Rev. Tom Carson of the United Church for Homeland Ministries at the National Association of Biology Teachers meeting in Denver. Their workshop will discuss, among other things, the role of evolution in liberal theology.



Board member Laurie Godfrey spent much of the summer doing fieldwork on fossil lemurs in the limestone caves of Madagascar. At summer's end, she delivered a paper co-authored with New England Primate Center Director (and NCSE member) Andrew Petto at the International Primatological Society meeting in Strasbourg, France. She was an invited speaker in the Baruch College (CUNY) Globus Seminar Series in New York.

Board Member John Cole was the keynote speaker and a symposium panelist at a special meeting of the Nova Scotia Archaeological Society in Halifax, Canada. He spoke on popular misunderstandings about archaeology and evolution. □

## Defective Issues?

Sometimes printing or binding results in defective copies being mailed. We certainly strive to avoid problems, but if they do happen, let us know and we will send a replacement issue.

For example, we've found that C/E 30 was mailed with a number of unintended blank pages to a handful of people; if you were affected, please let us know, if you haven't already, so we can correct the error. However, note that C/E 30 included a couple of blank last-pages because I screwed up as an editor allegedly understanding how print pages relate to manuscript pages. My apologies. However, this is a different matter—defective editing is, alas, not covered in your warrantee, but I promise to keep trying. □

## VISA and MasterCard Come to NCSE

NCSE is finalizing arrangements to enable us to receive credit card payments for books, tapes, subscriptions, etc. This should be especially useful to non-US members because it will solve the problem of paying in US-dollars only.

However, some renewal notices and the Fall Book Catalogue do not yet reflect this new service. If you wish to charge your renewal or book order, be sure to indicate the relevant info: Full name, card number, card expiration date—and TYPE of card—Visa or MC, plus your signature.

## NCSE And PFAW Cooperate On Textbook Reviews

Eugenie C. Scott

In 1990, NCSE and People for the American Way, the 300,000 member nonpartisan constitutional liberties organization, cooperated in reviewing high school biology textbooks submitted to the state of Texas for adoption. *Biology Textbooks 1990: The New Generation* was published to help Texas teachers and others make informed choices in textbook selection.

In 1992, NCSE and PFAW joined forces again, this time to review 7th and 8th grade science textbooks submitted for adoption in California. Dr. William Thwaites, biology professor at San Diego State University, and NCSE's executive director, Dr. Eugenie C. Scott, reviewed the textbooks and submitted written and oral testimony before the California State Curriculum Commission and the Board of Education during August and September of 1992.

Because of previous controversy over the strong position of evolution in the California Science Framework (see *Reports* 9(6):1, 10(1):10), anti-evolutionist Religious Right organizations such as Lou Sheldon's Traditional Values Coalition, and Robert Simond's Citizens for Excellence in Education, were expected to have a strong showing at the public hearings. The dates of the August hearings corresponded closely to the Republican national convention in Houston, at which members of the religious right prominent. Why Sheldon, Simonds, et al. passed up the September public hearing is not known. Perhaps they felt that they had already lost the battle of evolution in the California Science Framework and will be concentrating their efforts at the local level where choices are made among approved books.

The 34 page NCSE/PFAW report, *Have Junior High Science Books Evolved Since 1985?*, is available through NCSE for \$4.50, including postage. It focuses on whether the instructional programs submitted for adoption cover the nature of science (science as a way of knowing) and evolution accurately and sufficiently. Books varied considerably in their ability to meet the stated criteria, but the authors concluded that these books generally were improved over the books submitted seven years ago. Still, much remains to be done to produce accurate and up-to-date textbooks. □



## B o o k s

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Birx, <i>Interpreting Evolution</i>	*29.95	24.00
Clark, <i>Evolution and Cultural Literacy</i>	7.00	5.60
Dalrymple, <i>The Age of the Earth</i>	*49.50	39.50
Dawkins, <i>The Blind Watchmaker</i>	8.95	7.15
Dietz and Holden, <i>Creation/Evolution Satiricon</i>	9.95	7.95
<b>NEW</b> Desmond and Moore, <i>Darwin. The Life of a Tormented Evolutionist</i>	*35.00	28.00
†Ecker, <i>The Dictionary of Science and Creationism</i>	*34.95	27.95
Edey and Johanson, <i>Blueprints</i>	*19.95	15.95
<b>NEW</b> Eldredge, <i>The Miner's Canary</i>	20.00	16.00
Eve and Harrold, <i>The Creationist Movement in Modern America</i>	11.95	9.55
Godfrey, <i>Scientists Confront Creationism</i>	9.70	7.75
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Gould, <i>Hen's Teeth and Horse's Toes</i>	6.95	5.55
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<b>NEW</b> Numbers, <i>The Creationists</i>	27.50	22.00
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# Tracking Those

## Visiting the ICR Museum

Steven Linke  
Molecular Biology  
Salk Institute-La Jolla  
UC-San Diego

Since I study non-creation science nearby, I visited the Institute for Creation Research August 27th in the San Diego suburb of Santee.

Like any visitor to their building, I encountered the "ICR Museum of Creation and Earth History" which dominates much of the first floor. After receiving a museum pamphlet and a copy of the latest ICR Graduate School catalogue, I proceeded through the museum. The curator was listening to Rush Limbaugh on a radio at the front desk.

Visually, the museum is quite impressive and was quite busy for a Thursday afternoon, I thought. It is laid out roughly according to an ICR view of the order of Creation. The museum's "grand opening" was scheduled for September 18–20 but was already open to visitors. A few highlights follow, beginning at the end of the tour where we find a comparison of the "Creationist Tree" with deep roots and "good fruits" with the "Evolutionist Tree" which has "short roots" and "evil fruits":

### Creationist Tree

Genuine Christianity	Correct Practice
True Christology	True Science
True Evangelism	True History
True Missions	True Government
True Fellowship	True Americanism
True Gospel	True Family Life
True Faith	True Education
True Morality	True Hope

### Evolutionary Tree

Harmful Philosophies	Evil Practices
Communism	Abortion
Naziism	Promiscuity
Imperialism	Pornography
Monopolism	Genocide
Humanism	Euthanasia
Atheism	Infanticide
Amoralism	Chauvinism
Scientism	Bestiality
Racism	Homosexuality
Pantheism	Drug Culture
Behaviorism	Child Abuse
Materialism	Slavery

The origins of races was explained elsewhere: "The separate language groups no longer could intermarry freely with the rest of mankind [after the Tower of Babel sin]. As inbreeding and lack of access to the larger gene pool of genes occurred, ethnic characteristics developed. Furthermore, each local environment tended to favor selection of certain traits and eliminate the others. Ethnic characteristics, such as skin color, arose from loss of genetic variability, not from origin of new genes through mutation as suggested by evolution. 'The concept of race is an evolutionary idea.' Scripture teaches that 'God has made of one blood all nations,' Acts 17:26. All humans possess the same color, just different amounts of it. We are all descended from Adam and Noah." [And perhaps some women, too?]

Any questions?

[Based on a report in *BASIS* 11(9): 1–6; see **Resources**]

## Creationists and the Millipede

Frank J. Sonleitner  
Department of Zoology  
University of Oklahoma, Norman, OK

Creationists have argued that many adaptations of the millipede cannot be explained by evolution (E.L. Williams, G.F. Howe, and R.R. White, "A Desert Millipede: Evolution or Design? An Introduction," *Creation Science Quarterly* 28(1): 7–16). But can creationism explain them? Like most other millipedes, the desert millipede has an elaborate defense mechanism of glands opening out in each body segment to emit noxious and poisonous substances. Why should this be, if prior to The Fall there was no death or predation? The authors have no answer. They are also concerned about the Creator designing imperfect defense systems! If the Creator were to give prey 100% efficient organisms of defense, there would be no point in creating predators or parasites which could not survive. Why would an intelligent Creator devise so many things that work at cross purposes to one another?

~  
Why would  
an  
intelligent  
Creator  
devise so  
many things  
that work at  
cross  
purposes to  
one another?  
~



# Incredible Creationists

The authors claim that the Creator designed desert-dwelling fauna and flora—implying that there were deserts in existence prior to Noah's Flood, in direct contradiction to a number of creationist concepts such as global abundance of water, dew, and tropical vegetation in the original creation. The many legs of the millipede are said to be for strength in "bulldozing" burrows needed for hibernation in dry or cold seasons of the year. Were there dry or cold seasons

in the original creation? Finally, they write that this creature is specifically designed to be a "recycler" of dead plant matter in the desert. Again, this seems to contradict the creationist dogma that death did not exist before The Fall.

All of the specific "design" features of the millipede discussed in the *CRSQ* paper are completely at odds with creationist theology. □

## Stealth *continued from p. 3*

Grimstead, San Diego County organizer for what he calls the "National Coordinating Council," spoke cheerfully of employing the San Diego model nationwide to elect candidates by stealth, others are turning cautious in public comments.

Ralph Reed, as a leader of Pat Robertson's Christian Coalition, used to speak proudly of waging war "under cover of night" where "you shimmy along on your belly," but today he speaks more cautiously. Reed's allies now seek to avoid publicity while pressing similar tactics. Reed predicts a membership of 700,000 by next year, claiming that President Bush's defeat will wake up people to the need to reclaim America at the grass roots level.

In 1992, they are finding more opposition but using the same tactic. Various "spokesmen," office-holders and candidates refused to speak to *MacNeil-Lehrer* reporters. However, in an audio recording of Steve Baldwin, one of the movement leaders in San Diego, could be heard denouncing both the nationwide influence of witchcraft and the opponents of teaching creationism in public schools.

Are fundamentalist Christian organizations really taking over secular offices like school boards in record numbers, or are they just more visible now? Observers say it may be some of both. Perhaps there are no more "fundamentalists" in office than usual, but they are far more organized and eager to impose their personal views on public policy. The *New York Times* (31/10/92) estimates the number of conservative evangelical Christians in the US to be 23% of the adult population, but historically they have never voted as a bloc, and many disagree with the conservative social agenda. The *New York Times* (5/11/92) reports that 23% of the "White born-again Christians" voted Democratic this year,

compared with 18% in 1988, 22% in 1984, and 33% in 1980.

In 1988, Pat Robertson showed surprising strength in early primary elections, but he faded quickly. It is unclear how extensively his organization has been able to move out of that earlier-defined base of support in *national* politics, but in the less-publicized world of local contests, "stealth politics" has been effective, so far.

Ralph Reed, director of the Christian Coalition, says "It will be union boiler rooms and the black churches versus the evangelicals, and I think . . . there's going to be a lot of surprised faces on election night" (*New York Times* 31/10/92). A full page ad in *USA Today* by another group said that voting for Clinton would be a "sin against God."

Organizations spearheading Religious Right efforts include Pat Robertson's Christian Coalition, Robert Simond's Citizens for Excellence in Education, the Family Research Council, the American Research Council, the Freedom Coalition, and the United Christians of California. There are also allied single-issue organizations such as Operation Rescue and the National Right to Life Committee with often overlapping memberships. □

### Phil Ives Dies in Amherst

Dr. Phillip T. Ives, author of seminal papers on *Drosophila* genetics, long-time Amherst College biologist, and NCSE member, died in July 1992. Ives researched fruit fly genetics in the years after World War II when genetics was undergoing a revival of interest with the advent of the "New Synthesis" in evolutionary biology.

~  
... waging  
war "under  
cover of  
night"  
where "you  
shimmy  
along on  
your belly"



# Resources

*Listing items here or offering to distribute them does not imply NCSE endorsement or agreement; annotations are by the editor or various contributors. "SASE" = "Self-Addressed Stamped Envelope"*

AAAS. 1992. Careers '92: Alternative Paths. *Science* 257:1707-1769, 18 September. Info about post-docs, business careers, non-Ph.D. jobs, grant funding, etc. for scientists; every high school and college counselor should have this on hand to advise students. Available from AAAS, 1333 "H" Street, NW, Washington, DC 20005 for \$1.25+\$1.50 postage (\$0.60 postage for each additional copy).

Anon. 1992. The End of Life's Long Childhood. *The Economist* 325(7780): 103-104, 10 October. Pre-Cambrian paleontology and the origins of animal life. Report on research by Andrew Knoll of Harvard. Available from NCSE for \$0.50+SASE.

Asimov, Isaac. 1992. *Atom: Journey Across the Subatomic Cosmos*. NY: Truman Talley. 319 pp., \$12.00, pb. How finely can a piece of matter be divided? From the Greeks and Romans to today.

Bizzo, N.M.V. 1992. Darwin on Man in the *Origin of Species*: Further Factors Considered. *Journal of the History of Biology* 25(1): 137-147. How did Darwin think natural selection applied to humans? SASE+\$1.25 from NCSE.

Blumenshine, Robert J., and John A. Cavallo. 1992. Scavenging and Human Evolution. *Scientific American* 267(4): 90-96. New research shores up the conclusion that early humans were scavengers rather than big game hunters.

Boyer, Paul. 1992. *When Time Shall Be No More; Prophecy Belief in Modern American Culture*. Cambridge: Harvard University Press. 468pp, illus., \$29.95. The ancient roots of modern religious doomsayers such as Hal Lindsay (*Late, Great Planet Earth*, etc.).

Bratt, James D. 1992. Adam, Eve, and the Christian Reformed Church. *The Christian Century* 9-16 September, pp. 805-808. The history and theology involved in Old Earth vs. Young Earth creationism in the politics of the American "Dutch Reformed" church.

Browne, M.W. 1992. 40-Million-Year-Old Extinct Bee Yields Oldest Genetic Material. *New York*

*Times*, 25 Sept. Report on technical papers; DNA found in insects preserved in amber.

Bruce, Steve. 1990. Modernity and Fundamentalism: The New Christian Right in America. *The British Journal of Sociology* 41(4): 477ff. Not likely to succeed in the long run, he sez.

Carr, Joseph J. 1992. *The Art of Science; A Practical Guide to Experiments, Observations and Handling Data*. NY(?): HighText. 365 pp., \$19.95, pb. How amateurs can do pro-level science.

Fox, Richard C., G.P. Youzwyshyn, and D.W. Krause. 1992. Post-Jurassic mammal-like reptile from the Paleocene. *Nature* 358:233-235. Follow-up letter from Hans-Dieter Sues *Nature* 239:278 included. Discussion of new fossil Therapsid that hung around until the Cenozoic—if materials are correctly interpreted. SASE+\$1.00 from NCSE.

Freedman, Wendy. 1992. The Expansion Rate and Size of the Universe. *Scientific American* 267(5): 54-60 (November). Present measurements of the Hubble Constant vary by a factor of 2, leaving wide leeway for competing hypotheses about the fate of the Universe; new techniques may change the picture.

Gibbons, Ann. 1992. Mitochondrial Eve: Wounded, But Not Dead Yet. *Science* 257: 873-875 (14 Aug). News about flaws in the original computer runs—basic scenario may still be true re: African origin of modern humans. SASE+\$1.00 from NCSE.

Gleick, James. 1992. *Genius. The Life and Science of Richard Feynman*. NY: Pantheon. 531 pp., \$27.50. Bio of the amazing physicist, biologist, science education reformer and drummer.

Gray, Jane, and William Shear. 1992. Early Life on Land. *American Scientist* 80: 444-456. Minute fossils offer evidence that life invaded the land millions of years earlier than previously thought. SASE+\$1.50 from NCSE.

Hills, Ben. 1992. Ark Enemies. *Good Weekend* (Sydney Morning Herald magazine supplement), 15 August. Cover plus pp.28-31, +3 unnumbered pages about Australian Allen Roberts' Noah's Ark claims and geologist Ian Plimer's debunking efforts.





# Resources

Good overview of the flavor of the Australian argument. **SASE+\$1.25 from NCSE.**

Hoeveler, J. David, Jr. 1992. Inside Creationism. Review of *The Creationists*, by R. Numbers. *Science* 258: 487-488, 16 October. Takes us into a surprising, virtually unknown world, the reviewer says. (But not to NCSE!)

Johnson, Phillip E. 1992. The Religion of the Blind Watchmaker. A 2pp. printed ms. reply to Gould review of *Darwin on Trial*. **SASE+\$0.25 from NCSE.**

Johnson, Stephen D., Joseph Tasney, and Ronald Burton. 1989. Pat Robertson: Who Supported His Candidacy for President? *The Journal for the Scientific Study of Religion* 28(4): 387-399. Analysis of polls suggests Robertson's agenda alienated more than it attracted in 1988.

Kristan-Tollmann, Edith, and Alexander Tollman. 1991. The Flood Impact (translation of *Der Sintflut-Impakt*). *Mitt. Osterr. Geol. Ges.*, 84: 1-63 (5 pp. English abstract). Out of left field, 2 University of Vienna geologists' Vellikovsky-like argument for young Earth and recent memories of Ice Ages, Floods, etc. a few thousand years ago. **Summary available from NCSE for \$2.00 + SASE.**

Lawton, Kim. 1992. The New Face(s) of the Religious Right. *Christianity Today* 20 July, pp. 42-45. Grassroots, school board, and other local fronts, now, and more effective because out of national media spotlight.

Leakey, Richard, and Roger Lewin. 1992. *Origins Reconsidered*. NY: Doubleday. 512 pp., illus. \$25.00. 15 years after their first *Origins* book; half about field research, half about where humans fit into nature.

Levinton, Jeffrey S. 1992. The Big Bang of Animal Evolution. *Scientific American* 267(5): 84-91 (November). Several proposed explanations of the "Cambrian Explosion" ca. 600 mya seem to fall short.

Lewin, Roger. 1992. No Monkey's Uncle. *Book World*, p. 4, 13 September. Full-page review of Ronald L. Numbers' book, *The Creationists* (Knopf).

Linke, Steven. 1992. A Visit to ICR. *BASIS* 11(9): 1-6, September. Detailed description of the ICR's

new Creationism museum. **SASE+\$1.00 from NCSE.**

Livingstone, David N. 1992. Darwinism and Calvinism. The Belfast-Princeton Connection. *ISIS* 83: 408-428. Historical study of diverse reactions to Darwin at two different 19th century Calvinist centers.

Matson, David. 1992. A Short List of Evolutionary Transitional Forms. 12pp, manuscript. Discusses all your favorite intermediates. Good for debating. Includes references. **\$2.00 from NCSE.**

May, Robert M. 1992. How Many Species Inhabit the Earth? *Scientific American* 267(4): 42-48 (October). No one knows, yet urgent policy decisions depend on knowing the answer.

Menendez, Albert J. 1992. The Great Satan of Humanism. *The Humanist* 52(5):18, 36 (September). Brief survey of fundamentalist "Christian school" textbooks. **SASE+\$1.00 from NCSE.**

Menendez, Albert J. 1992. *Visions of Reality; What Fundamentalists Schools Teach*. Buffalo: Prometheus Books. 152 pp., \$14.95. Extended version of the above; by the Americans for Religious Liberty Research Director. Order from ARL, Box 6656, Silver Spring, MD 20916.

Moorhead, James H. 1984. Between Progress and Apocalypse: A Reassessment of Millennialism in American Religious Thought, 1800-1880. *Journal of American History*, December. Old article reference highly rec'd by *Wilson Quarterly*; did prophesy of "end times" really die out or just fade?

Numbers, Ronald L. 1992. *The Creationists*. NY: Alfred Knopf. A detailed history of modern creationism; traces its lineages, obscure and famous, via exhaustive interviews and document searches. **Available from NCSE at discount; see centerfold.**

Preston, Richard. 1992. A Reporter at Large: Crisis in the Hot Zone. *The New Yorker*, 26 October, pp. 58-81. Chilling description of US Army and Centers for Disease Control to identify and control a "break out" of evolving strains of lethal tropical forest viruses with no antidote or cure and a 10% or lower survival rate among infected humans. Human pressures on tropical zones are said to be fomenting emergence of new diseases.

~  
Phillip  
Johnson  
replies to  
Gould,  
Scott, and  
his other  
critics.  
~



# Resources

Purcell, Rosamund Wolff, and Stephen Jay Gould. 1992. *Finders, Keepers; Eight Collectors*. NY: Norton. 157 pp., \$50. More of Purcell's amazing color photos of museum collections and Gould's essays about the pictures. Available through NCSE; call Theresa, 510-843-3393.

Sagan, Carl, and Ann Druyan. 1992. *Shadows of Forgotten Ancestors*. NY: Random House. New book on origins and evolution of life on earth.

Schrock, J. Richard. 1991. Trends and initiatives in science education in Indiana, 1988. *Proceedings of the Indiana Academy of Science* 100:49-64. Good news and bad news about the state of science education in Indiana. One in five teachers favor "equal time" for creationism in science classes. SASE+\$1.25 from NCSE.

Steinfels, Peter. 1992. The Big Bang, and Why Few Theologians View it as a Vindication of Biblical Accounts. *New York Times*, 29 August. Theologians stress that physics isn't religion.

Strahler, Arthur N. 1992. *Understanding Science: An Introduction to Concepts and Issues*. Buffalo: Prometheus Books. 409 pp., \$25.95. See centerfold for special NCSE price.

Taylor, Charles A. 1992. Of Audience, expertise, and authority: the evolving creationism debate. *Quarterly Journal of Speech* 78(3):277-295. "Creationism endures not only in spite of the response of the scientific community, but also, in part, because of it. An analysis of the controversy between 1975 and 1990 indicates that the scientific response to creationism misconstrues both the scientific pretensions of creationism and the relative insularity of scientific decision making on questions of public policy." Available from NCSE for \$2.90

Toumey, Christopher P. 1990. Sectarian Aspects of American Creationism. *International Journal of Moral and Social Studies* 5(2): 116-142. Title describes it. \$3.00 from NCSE.

van den Bergh, Sidney. 1992. The Age and Size of the Universe. *Science* 258: 421-424, 16 October. Highly technical survey of new techniques.

Wilson, E.O. 1992. *The Diversity of Life*. Cambridge: Belknap Press of Harvard University Press. 424 pp., \$29.95. Explores evolutionary

diversity and explains the extent of alarming species and habitat loss, predicting a possible 20% extinction rate in the near future unless governments take drastic action. See centerfold for special NCSE price.

## Especially for Teachers

AAAS. 1992. *Careers '92: Alternative Paths*. *Science* 257:1707-1769, 18 September. Info about post-docs, business careers, non-Ph.D. jobs, grant funding, etc. for scientists; every high school and college counselor should have this on hand to advise students. available from AAAS, 1333 "H" Street, NW, Washington, DC 20005 for \$1.25+\$1.50 postage (\$0.60 postage for each additional copy).

AAAS. 1992. *Sourcebook for Science, Mathematics and Technology Education*. #91-38S from AAAS Books, Box 753, Dept. A55, Waldorf, MD 20604. \$12.95 + \$4.00 shipping. 2500 programs and organizations involved in science education.

BSCS. 1992. *Teaching About the History and Nature of Science and Technology: A Curriculum Framework*. \$3.00 from: Biological Sciences Study Committee, 830 N. Tejon St, Suite 405, Colorado Springs, CO 80903-4720 ("attn:CAT").

Beardsley, Tim. 1992. Teaching Real Science. *Scientific American* 267(4): 98-108. Any revolution in science ed faces an uphill battle amid school budget cuts, textbook "dumbing down," etc. SASE+\$1.25.

*EPA Journal* is a bimonthly magazine for the general public interested in environmental topics. Departments include "For the Classroom." Order from: Superintendent of Documents, New Orders, PO Box 371954, Pittsburgh, PA 15250-7954; \$10/yr US, \$12.50/yr, other countries.

Science is . . . , published by The Communication Project with Scholastic, is a 515 page compendium of hands-on exploration activities, projects, puzzles, games, and facts for children 6 through 14. \$29.95. Call 1-800-325-6149 in the US, 1-800-325-6149 elsewhere for orders or info.



# Keeping Tabs

## Johnson vs. Sarich Debate: Did NCSE Get It Wrong?

### A Reply

John L. Wiester, Chair,  
Committee for Integrity in Science Education  
American Scientific Affiliation, Buellton, CA

I read with interest the report by Mary Lou Mendum on the March 4th debate between Berkeley professors Phillip E. Johnson and Vincent Sarich at UC Davis (*Reports* 12(1)). It's a pity that the debate videotape is technically poor, because with the exception of some poorly phrased questions from the audience, the content is excellent. Indeed, it was a pleasure to watch this intelligent interchange between two mutually respectful Berkeley professors. It was refreshing to see light rather than heat shed upon the audience.

My review of the videotape indicates Mendum's report has not accurately reflected Johnson's statements. For example, her title read, "Berkeley Law Prof Opposes Non-religious Nature of Science." The text, reinforced by a high-lighted call-out, read "[Johnson] vigorously argued against the non-religious nature of the scientific method itself."

Johnson did *not* oppose or argue against the non-religious nature of science or the science method. What he did object to and "vigorously" argue against was the misuse of science to advance the program of metaphysical materialism. To quote him from the tape: "But of course, there are two lessons that we should have learned about science from the twentieth century experience, and not just one. One lesson is that scientific technology properly applied does work wonders. The other is that pseudoscientific philosophies have continually borrowed the prestige of experimental science in order to put across philosophical, political, and religious doctrines of importance to certain movements. The great examples of our time are, of course, Freudianism—Freudian psychoanalysis, which was accepted by all the reasonable people in the universities and in the intellectual journals as science for so long—and Marxism. Darwinism applies to society. And indeed, in his introductory textbook for evolutionary biology students, Douglas Futuyma states that Darwin did for biology what Marx did for society and Freud for the mind. He advanced the program of mechanism and materialism, of metaphysical naturalism."

I would also like to correct Mendum's comment that Johnson stated "three times during the evening, that

one of the major reasons why he rejects evolution is that artificial breeding programs have not produced new species."

Johnson was not dealing with "evolution" which he carefully pointed out has many different meanings, but with a specific claim of Darwinism, the blind watchmaker thesis, "that unintelligent purposelessness mechanical forces created everything." Johnson also pointed out that he didn't want to lay too much weight on the lack of unequivocal examples of a new species, because he was concerned not with the production of a new isolated breeding group, but with something truly new, such as new kinds of organs and basic body plans. "In fact, the evidence of artificial selection is that change occurs within a very limited radius."

Further, Johnson called the use of artificial selection to demonstrate what you can do without purpose or intelligence, "a simple logical fallacy. What the artificial selection analogy really proves is that even with intelligence operating through selection, you get only limited variation."

In closing, I hope there will be more debates of the Johnson-Sarich format so that we can all become better educated and more precise in our communication as a result.

### Rejoinder

Mary Lou Mendum  
Department of Viticulture  
University of California-Davis

John Wiester's criticism of my article hinges on two points: first, my statement that "Johnson vigorously argued against the non-religious nature of the scientific method itself," and second, my paraphrasing Johnson's contention that he rejects evolution because he knows of no new species which have been produced through artificial breeding programs.

The Johnson quotations Wiester offers with respect to artificial speciation, presumably transcribed from his tape of the debate, prove my point admirably. Johnson cites a lack of artificially created species as a reason to reject evolution. Such artificial species are fairly common among cultivated plants, and they can involve rather large changes in "kinds of organs and basic body plans." I can't really blame Johnson for not knowing

~  
"[Darwin]  
advanced  
the program  
of  
mechanism  
and  
materialism,  
of  
metaphysical  
naturalism."  
~



# Keeping Tabs

about plant breeding, since few popular science books bother to mention the subject. However, his understandable ignorance on the subject doesn't change the fact that he based his argument on a false premise, and Sarich should have called him on it.

Wiester's first objection, that Johnson was not, in fact, arguing against the non-religious nature of science, is more complex, because it involves semantics. Wiester and I are using very different definitions of "science" and "non-religious nature."

I define science as the process of discovering natural explanations for natural phenomena. As such, science is unavoidably materialistic. I agree with Wiester that not all important materialistic thought is scientific, as his Johnson quote demonstrates. However, the unarguable fact that Freudian psychoanalysis and Marxist economics do not conform to rigorous scientific standards does not change the equally unarguable fact that Darwinian natural selection *does*.

If Wiester wishes to limit the definition of "religion" to recognized denominations, with attendant dogma, scripture, set prayers, and clergy, then he is right. Johnson never advocated the addition of any particular denomination's religious assumptions to the scientific method.

However, in my article, I used the word "religion" in a broader sense to refer to supernatural thinking in general: the assumption that one or more beings exist which are not bound by natural laws. In his talk, Johnson repeatedly challenged Sarich for proof that natural laws could not, in theory, be suspended at certain times and places, and that such a suspension of natural law could not be responsible for fudging biologists' data enough to convince them that life evolved.

An old standby in freshman philosophy classes is to ask students to prove the world was not created ten minutes ago, complete with an internally consistent history of material objects and memories. By the time they get to be sophomores, the students have learned that one can't prove either side of a question if the question is stated in such a way as to invalidate, in principle, every existing piece of evidence.

If one assumes, as Johnson asks scientists to assume, that the data from any experiment are just as likely to be the result of a supernatural being's practical joke, as they result from natural laws, then the scientific method is a waste of time. Scientists might just as well give up and go home. I am sure that this

would please many creationists, since discarding all scientific evidence as unreliable would place religious explanations on equal footing with materialistic ones for the first time in three centuries.

However, even though the materialistic scientific method must also beg the theoretically unprovable question about whether suspensions of natural laws are possible, it has one irrefutable advantage over religious thought systems which have begged the question in the opposite way. It works.

*[Editor's note: It is not my policy to publish endless debates about debates! However, I hope this exchange makes some sense to readers, even standing alone.]*

## Bible-Science Next for Rumania?

John Cole

I recently received a fund-raising phone call from a man speaking for the Bible-Science Association. He asked if I knew that "Greg just returned from an exciting visit to various Eastern European countries where there is a tremendous thirst for the Gospel?"

I thought fast and realized "Greg" is the Executive Director of B-SA and said, "No, I didn't know."

My caller went on to explain that wages were so low in those countries that they could set up a publishing and evangelizing project in a given country "for only \$100 per month—that's for writing, editing, desktop publishing, printing, and preaching the Gospel! We can hire people for as little as \$15 per month over there! Can we count on you?"

"No, I'm afraid not. . . ."

"But Mr. Cole, for your pledge of \$100 per month, you could support a month's work in someplace like Moldova or. . . ."

"No, thanks," I said.

From another Board member, I heard that they have specific plans to set up operations in Rumania. This confirms what we have reported before. Creationists are trying to move into Eastern Europe in a big way. We have no idea how successful this particular project will be, but long-stifled religious freedom combined with severe shortages of books, etc. and low wages make former Communist countries ripe targets for "scientific" creationists. *[Quotations are approximate: based on my notes—JRC]* □

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An old  
standby in  
freshman  
philosophy  
classes is to  
ask students  
to prove the  
world was  
not created  
ten minutes  
ago  
~



## CD-ROM *Darwin*

Reviewed by Butler Crittendon  
San Francisco

1992. Multi-media CD-ROM for MACs and PCs, created by Pete Goldie and Michael Ghiselin. \$99.95 from Lightbinders, Inc., 2325 Third Street, Suite 320, San Francisco, CA 94107 (800-432-3766). \$99.95; \$9.00 more for optional CD caddy. Requires 640K RAM with 500K available; Super-VGA, 512K on video board; Microsoft CD-ROM extension versions 2.0 or later.

CD-ROM *Darwin* is a first class addition to the library of anyone interested in the serious study of evolution or who just likes to read original works, including graphics. The sounds, of course are new—some 100 Megabytes of the 308 or so on *Darwin*, and only possible due to the multimedia capabilities of CD-ROM. The disk includes the complete text and computer replications of the original illustrations of Charles Darwin's *The Voyage of the Beagle* (final ed.), *Origin of Species* (6th/final ed.), *The Descent of Man* (final ed.), Darwin's and Wallace's 1859 manuscript outlining the theory of evolution, Michael Ghiselin's *Triumph of the Darwinian Method*, a Darwin timeline, a 1000+ item bibliography, and a brief introduction by Goldie and Ghiselin.

Using the CD-ROM medium requires more than technical skills because the selection of content is of great importance. Goldie's Ph.D. is in biology, so he is equipped for the task.

*Darwin* includes some 650 illustrations, including original maps, birds and other animals, geological data, plants, photos and portraits of the key players and how they lived, sketches such as the layout of the Beagle, and much more. Many of the images represent the first republication since the 1800s, and some of the material by distinguished naturalists has never before been published. The natural sound recordings come from the Cornell University Laboratory of Ornithology.

While *Darwin* is being marketed complete, by now, the total package was not available for review [May 1992]. It [seems] very user-friendly, with "Search" and "Browse" capacities—by word, author, subject and title. It allows Function-key rather than mouse-use, for people tired of using mouse muscles. The current edition does not support a mouse.

The brief introduction by Goldie and Ghiselin concludes with an invitation to users to contribute to future editions.

Without loss of image quality, and through compression, there is room for about four times more material on a future release. Users are encouraged to send pictures (still or animated), sounds, or special text material. In conversation with Goldie, I learned that *DiscPassage* is the one most widely-used CD-ROM software, with several dozen products using it. . . . [A] Windows version is in the works which probably will read the current disk. However, for anyone interested in Charles Darwin and Evolution, for pleasure or research, this *Lightbinders'* product is excellent . . . and a long wait for [a new version] is not warranted.

Finally, on a personal note I'd like to add that while I accept evolution and Darwin as 'reality,' I've come to the conclusion recently, after considerable study, that evolution does *not* explain *Homo sapiens'* presence on Earth. While I also do not accept the creationists' explanation, I have been stunned by my conclusion that they are closer to the 'truth' than the evolutionists. Anyone interested in hearing more about my research and/or obtaining a short reference list, please free to call. (415-346-9321)

[Reprinted with the author's permission and slightly condensed from *Blue Notes*, an IBM user-group newsletter.] □

## Chemistry Olympiad

College/university chemistry teachers are invited to apply for a 3-year position as mentor for the US National Chemistry Olympiad Program. Duties include helping plan and conduct national study camps and service on international competition juries. For info, contact the American Chemical Society, 1155 16th Street, NW, Washington, DC 20036 (202/872-6169). The program does not limit the project to "chemistry professors;" anyone in several fields could potentially participate.

The deadline is 4 January 1993. (If you miss the deadline, the program may continue in future years.) □

~  
rave  
review—  
*Darwin* for  
CD-ROM  
personal  
computers  
~



## Cosmos, Bios, Theos

Reviewed by Frank Sonleitner  
Dept. of Zoology, University of Oklahoma

*Cosmos, Bios, Theos: Scientists Reflect on Science, God, and the Origins of the Universe, Life, and Homo sapiens*, edited by Henry Margenau and Roy Abraham Varghese. LaSalle, IL: Open Court Publishing Co. 1992.

Most of this book is an anthology of views of 80 scientists, all of whom are theists or at least sympathetic to a religious view of reality. Their comments concern the origin of the universe, life, and the human species and the relationships between religion and science. The editors introduce the book with views on the Big Bang, the Anthropic Principle, Uniformitarianism, etc. If you don't believe in *Genesis*, the editors imply, you are an atheist.

Part I of the book considers the views of 30 astronomers, mathematicians, and physicists, while Part II examines the views of 30 biologists and chemists. All are distinguished in their fields, and they include over 20 Nobel Prize winners. "Creation scientists" are conspicuous by their absence. Part III is a debate between an atheist (Antony Flew) and a theist (H.D. Lewis) about the existence of God and the origin of the universe; this mainly concerns the argument as to whether the Universe can be its own cause, or must one postulate a separate ultimate cause for it?

Part IV contains two concluding postscripts on the origin of the Universe and relativity, quantum theory, and the mystery of life.

Most authors in the volume accept evolution and the Big Bang; some identify themselves explicitly as "Christians." At least one contributor, Thomas C. Emmel, a critical reviewer of *Of Pandas and People*, is an explicit evolutionist. □

## Toshiba/NSTA ExploraVision Awards

\$300,000 in awards and prizes will reward "creativity, ingenuity, and teamwork" in science education. NSTA is mailing 240,00 entry kits to teachers in the US. Teachers who have not received kits should contact Toshiba/NSTA ExploraVision Awards, 1742 Connecticut Avenue, NW, Washington, DC 20009. □

## Research Fellowships for Teachers

The American Society of Cell Biology and the American Society for Clinical Investigation both offer summer 1993 research fellowships for secondary school teachers. Both involve pairing teachers with research scientists, each of whom receives part of the awards.

For the ASCB, the ten-week fellowships provide teachers with a \$4000 stipend, plus \$850 to defray other expenses and \$750 for the sponsor-scientists. There were 26 awards in 1992. Applications are due 20 January 1993. For application forms and the names of possible scientist-mentors, write: ASCB, 9650 Rockville Pike, Bethesda, MD 20814-3992 (301/530-7153).

The ASCI fellowships provide \$6000 stipends for teachers to work 8-10 weeks in the laboratory of an ASCI member. Again, candidates should submit applications jointly with a member-mentor. The deadline is 31 January 1993. For applications and information, write: Christine Maline, 1983 Science Teacher Research Fellowships, ASCI, 6900 Grove Road, Thorofare, NJ 08086-9447 (FAX 609/848-5274).

## Secondary School Prizes for Chem Teachers

Each year, the American Chemical Society sponsors a competition which recognizes innovative classroom and laboratory activities and teacher outreach activities to encourage other teachers. In each case, emphasis is on polymer chemistry. The "Award for Excellence in Polymer Education by a Junior High or High School Chemistry Teacher" is awarded by the ACS Polymer Education Committee. National winners and Honorable Mention recipients receive cash awards, lab supplies, and certificates of recognition.

1993 applications are due 31 January 1993; write Susan Gertz, Polymer Ed Coordinator, c/o NCPE, University of Wisconsin-Stevens Point Department of Chemistry, Stevens Point, WI 54481. □

Faith is a fine invention  
When gentlemen can see,  
But *Microscopes* are prudent  
In an emergency.

Emily Dickinson, ca. 1860

views of 80  
scientists,  
all of whom  
are theists  
or at least  
sympathetic  
to a  
religious  
view of  
reality



*Rod Kuehn submits the following to NCSE for reader reaction—a statement which he submitted as a “minority report” to a Minnesota school policy committee. This is not an NCSE policy broadside but is reprinted in order to solicit comment or foment discussion. What do you think? Send replies or comments clo—Ed.*

## Guidelines for Handling Challenges to Evolution

*Rod Kuehn*

1. The US Supreme Court declared in 1987 that scientific creationism is a religious doctrine. Creationism lacks the characteristics of science and lacks scientific support. It is therefore illegal and inappropriate to include creationism as part of the public school curriculum. Permitting the teaching of creationism would open the district to lawsuits based on a violation of the 1st Amendment to the Constitution of the US.

2. Educational curiosity cannot be maintained if questioning is discouraged. However, it is also true that extensive debate can destroy a curriculum by devouring too much time. The following guidelines are designed to balance these competing interests.

a. The student should understand the non-theistic nature of science. Religious arguments are not appropriate in a science classroom.

b. The teacher shall have access to reference materials [on the evolutionists' responses to creationist claims] somewhere in the school. . . .

c. The scientific attitude of open inquiry and critical thinking requires that courteous challenges be welcomed. The teacher shall decide whether the most effective response would be a classroom discussion, distribution of reprints or a method described below. If too many

challenges are brought, the instructor may ask the students to combine their efforts and select a small number of points to contest. The instructor may also choose a few of the most significant issues to wrestle with.

d. The student should challenge the appropriate instructor. Questions of physics should be directed to the physics teacher [for example].

e. Teachers are not [usually] professional evolution[ary scholars] and should not be required to defend all of the intricacies of evolution. It is reasonable, however, to expect a good knowledge of the most germane lines of evidence such as the implications of the orderly stratification of fossils and the important intermediate fossils.

f. Because poorly focused discussions are unproductive, students who wish seriously to challenge a teacher should do so in writing.

g. Judgements are apt to hinge on the validity of evidence and its interpretation. The challenger shall therefore present the original journal articles used as evidence [or resources]. The media center may help obtain the required [items from libraries]. Similarly the instructor shall present information supporting evolution.

The information can then be evaluated for accuracy and quality of source.

h. If the instructor thinks the question suitable, and time is available for general discussion, the comparison should be done in the classroom. The comparison may be done privately if the challenge occurs at an inappropriate time or if the material is not sufficiently germane to the class.

3. Middle and Senior high schools should maintain a basic library collection of books presenting theological, legal, and scientific issues [pertaining to] evolution [education]. [In addition to works by evolutionists and “scientific” creationists], this collection should also contain a range of other non-fundamentalist Christian and non-Christian creation stories as well as the views of agnostics and atheists.

4. Parents have a right to know what their children are being taught. The District will therefore have regular showings of controversial materials at open-houses and other school-sponsored events. Furthermore, the District will develop procedures to expedite [parental access to controversial materials].

5. Topics of special concern to the community should receive special attention to ensure student understanding.



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## Superintendent Bill Honig May Not Appeal

# California School Reformer Convicted

John Cole

(Compiled from *San Francisco Examiner*,  
*San Francisco Chronicle*, *Oakland Tribune*, and *New York Times* reports)

**A** California court convicted Bill Honig of felonious "conflict of interest" on January 29, 1993, as we go to press. Sentencing was scheduled for late February.

Honig initially vowed to appeal and to continue in office until forced out—one of the penalties of a California felony conviction in addition to possible incarceration is removal from office and a lifetime prohibition against

holding public office again. Later, Honig indicated that he might resign and forego an appeal, because of the cost involved, if the conviction were reduced to a misdemeanor. His attorney said he was anxious to get back to work as an educator and did not realistically expect to seek further public office.

The trial judge had ruled inadmissible any evidence or argument about Honig's mo-

Honig, continued on p. 11

## Suburban Chicago High School Teaches Creation Science

Ranse Traxler

Wheeling High School District #214, in suburban Chicago, considers creationism to be as scientific as evolution.

For some time now, teacher Terry Mondy has been teaching creationism to his students as a scientific alternative to evolution. He has, in fact, publicized his success in creationist publications. On April 29th [1992] I made two telephone calls to the district, identifying myself as a reporter for the National Center for Science Education, national "parent" organization to the St. Louis Association for the Teaching of Evolution I direct.

I first spoke with Donald Haid, Associate Principal. He stated, "We allow Mr. Mondy to teach creationism in our school. We have developed a policy which allows teachers

Chicago, continued on p. 5

## Contents

Editor's Desk	2
Letters	4
News	6
NCSE News	10
Tracking Those Incredible Creationists	14
Resources	16
Keeping Tabs	19
Science Ed	23



# Editor's Desk

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Too much news is an editor's dream, and we have a lot for this issue—reports from various battlegrounds, news about evolution education, etc. Too much to include everything, in fact, so I try to balance various topics of varying degrees of interest to large and small parts of the NCSE constituency. NCSE deals daily with small crises which never make it to the national media, and there are even more situations we don't hear about in the first place.

But more news is needed. As always, we need to hear from readers about local controversies. Requests for information or help or notices of immediate problems should be sent to the Berkeley office rather than me—I edit a quarterly newsletter, not the NCSE “Hotline”—I hear from Genie Scott, of course, and I also appreciate direct reports.

LEXIS is a national (US) computerized news service dealing with daily legal issues such as lawsuits, court decisions, legislation, etc. Do any of you subscribe? If so, NCSE would be very grateful for any information you might discover by checking out a few of the usual suspect keywords such as creationism, origins, evolution, science education, equal time, etc., as well as the newer versions of legal action and terminology which tend to eliminate direct references to creationism, even though that is their basic topic. Some of the latter topics might include references to “free speech in science” and other phrases most of us would tend to endorse; the problem is that creationists are using more sophisticated terminology to cover the same old agenda, and that is where NCSE gets interested.

So if you're a lawyer or computer junkie in touch with LEXIS (or NEXIS), your help in monitoring legal issues would be invaluable. We can't afford this on our own.

Similarly, other commercial computer databases are beyond our means. If you subscribe to any news network, I hope you will keep your computer's eye peeled for news about creationism, antievolutionism, science education controversies, etc. and don't assume we “already know about this.” We try to stay on top of the news and report back to members, but we need individuals' help—direct, local reports and copies of news reports on computer databases, AP, UPI, Reuters, etc. newlines, and from any other source.

SO—Please send your news to NCSE, and if you have access to computer data, I hope you will share it. And good old clippings are always welcome.

The long-awaited *Creation/Evolution Index* will go to press in February 1993 and will be mailed free to subscribers in good standing in March. Its 76 pages are a detailed guide to the first 25 issues, 1980-1989.

*John Cole*

If you are drafting or revising a will or insurance policy, please consider naming NCSE a beneficiary. Your support can continue far into the future, and NCSE's 509(c)(3) IRS status might provide some benefits to your estate, as well.



# Creationism in Turkey

John Cole

A conference on "scientific" creationism convened in Turkey in October 1992. A predominantly Muslim nation, Turkey has officially been a non-sectarian state since the days of Ataturk who led the conversion into modernity out of the ashes of the Ottoman Empire after World War I. Even earlier, Turkey granted sanctuary to Jews forced out of Spain in 1492 and has long considered itself religiously tolerant and diverse in a volatile region.

Duane Gish and John Morris represented the American Institute for Creation Research at the conference, as reported in the ICR's December 1992 *Acts and Facts*. Cautioned against Christian evangelizing at the meeting, the ICR speakers say they decided to attend, anyway, in order to share their experience with Islamic colleagues whose research on creationism they wanted to encourage. *Acts and Facts* reports that 2500 people attended the conference and that many leading scientists and educators seemed to come around to the need for equal-time education. They report that they advanced the cause especially well in personal meetings and discussions not on the program itself because Muslims deserved to hear their message at least as much as "theists, agnostics, or New Agers in this country [USA]."

Also, writes Morris, "By seeing that Christian scholars rather than Muslim were in the forefront of creation research, perhaps a curiosity would be awakened about Christianity among Muslims." As usual, the "scientific" creationists acknowledge themselves to be missionaries more than scientists, even when asked to attend a religious conference and implored to avoid proselytizing.

ICR reports that "sometime in the 1980s" the Turkish Minister of Education called them for help in eliminating the "secular-based, evolution-only teaching dominant in their schools and replace it with a curriculum teaching the two models, evolution and creation, fairly." ICR books were then translated and "distributed to all Turkey's public school teachers."

Unlike scholars used to cooperating with colleagues from other cultures and religions, ICR people seem to be very worked up about participation in this conference sponsored by Muslims. The December *Acts and Facts* also includes an article by John Morris, "Do Muslims Believe in Creation?" Sort of, he says—and he concludes that "Christians" should

use convergences with the Koran as a wedge to facilitate evangelism among Muslims. This kind of conclusion will surprise anyone working for ecumenical understanding and cooperation in religion and multicultural cooperation and respect among scholars. (Perhaps we should not reveal this trade secret, but scientists just do not behave this way—they cherish opportunities to learn from others rather than trying to convert their religious beliefs!)

NCSE invites information from readers about this and other similar activities reported by the creationists in North America and elsewhere. Are such reports accurate? Complete? We know that some aspects of creationist reports are ritualistic and biased ("Dr. Gish won the audience over when he revealed that there are no transitional fossils"), but their accounts of meetings held, books translated and distributed, missionary work in sensitive political arenas, etc. are potentially checkable.

What can you add more substantively?

We are interested, of course, in any information about efforts by "scientific" creationists to cooperate with or infiltrate social or political movements or religious organizations in America. We are particularly interested in information about creationist efforts to cooperate with or infiltrate Islamic fundamentalist movements or involve themselves in other foreign policy and political issues. All such activities can be politically explosive. □

**INDEX TO ISSUES 1-25, 1980-1989.** Ken Saladin's 76 page Index to *C/E* is now available! It will be sent **free** to subscribers in good standing ca. March 1, 1993; copies are \$10 each to others.

~  
ICR books  
translated  
and  
distributed  
to all of  
Turkey's  
public  
school  
teachers  
~



# Letters

## Appreciates NCSE

Keep up the good work. I really enjoy *Reports* as well as the *Creation/Evolution* journal issues.

Jim Cherry  
Springdale, AR

*It's nice to hear, since complaints are more likely to spur people to write!*

## Corrects Description of "The Flood Impact"

The description of "The Flood Impact" by Kristan-Tollmann and Tollmann (12(3:17) [summary available from NCSE for \$2.00] is incorrect. Contrary to the item, they do not argue for a young Earth. Their paper discusses evidence for a global flood ca. 9545 B.P. caused by the oceanic impact of fragments from a disintegrated comet. They mention that mankind has witnessed over 100 other impacts, the most catastrophic one having occurred some 700,000 years ago when *Australopithecus* disappeared.

The paper may be "out of left field," as you state, but it has nothing to do with "young earth" arguments. The comparison with Velikovsky is not appropriate, either, because his catastrophes involved the near collision of planets in historical times, not the direct impact of comets in pre-historical times.

It is cause for concern when a publication that advocates "good science" against creationism distorts the content and argument of a scientific paper.

The Tollmanns' paper has more in common with Clube and Napier's work than Velikovsky's. [See **Resources** for references.]

Leroy Ellenberger  
St. Louis, MO

*A couple of lines can never be a definitive review or summary. I didn't intend to be misleading but rather to note an article "out of left field" which was NOT from creationists yet argued for a (relatively) recent, world-wide flood, date independent of young-earthers who might jump on it with glee. Similarly, the Velikovsky comparison seemed fair, given the brief format—I did not mean to equate the arguments. Most scholars now accept an important role for impacts on life on Earth from outer space by comets, meteors, or whatever, but the exact roles are hotly debated; and a major impact and world flood within the past 10,000 years is definitely not "orthodox."*

## Hellfire?

When you die you will go to Hell and oblivion, you're intolerant and will be punished, you idiots who refuse salvation Dr. Morris offers, praise Jesus. We'll watch your agony for eternity as you suffer endless torture and enjoy it in the rapture while you suffer pain without end.

(unsigned)  
NJ postmark

*No one loves an editor, I guess. . . .*

## Clintonology

If you examine the January 4 issue of *Time Magazine*, with Bill Clinton on the cover as Man of the Year, you'll find in the photo-story a picture of the President-elect sitting at home in front of several shelves of his books. Easily visible among them is *The Hominid Gang*, by Delta Willis. Hope this portends good things for science teaching in America!

Jonathan Marks  
Yale University  
New Haven, CT

sister groups could at least function as a relay point, assuming that there are enough members in that [new] region or nation where sending [information or *Reports*] could be distributed overseas in bulk and then distributed where they need to go.

I don't know if any of this would work or not, but I had to try. Again, Great work to everyone at NCSE!

Betsy McCall  
Concord, OH

## "Foreign" Subsidies?

[Many US residents cannot afford subscriptions to NCSE. However, a few thoughts about foreign subscriptions]:

1. Consider requesting special donations to help fund overseas mailing, especially from members in wealthier nations like the US.
2. Consider subsidizing subscriptions more in countries with greater financial problems like the former Soviet Union and less in wealthier nations like Canada.
3. Consider encouraging members to set up sister groups in [other] countries or regions, following somewhat the example of the religious groups. Access to one computer with paper for printing, if the funding is provided for it is provided from subscription costs, might be [cost-effective]. If not that, then

## More on Subsidies

Subscribers everywhere can need subsidies. I'm a teacher laid off in January '92 trying to feed my family with minimum-wage jobs now that Unemployment Ins. has ended. I still sometimes meet with my former biology students and with others who need NCSE info. NCSE will be at the top of my list when I can afford to subscribe again, but meanwhile I'm on your list of about-to-be-terminated. Is there any possibility of a subscription price on a sliding scale, based upon ability to pay?

Anonymous  
(Massachusetts)

*I'm very sympathetic and don't know the solution. NCSE needs major contributions, an endowment fund and grant funds, since by definition we serve a lot of people who can't pay for the service! But we also serve people who can pay but don't because "someone else will." One suggestion: Convince your local library to sub-*



# Letters

scribe. And convince your (former?) teacher union and colleagues to convince schools to subscribe and/or subsidize such subs. Ask colleagues to subscribe.

~

## The Phillip Johnson Phenom

If I understand UC Law Prof. Phillip Johnson's position . . . it is that divine intervention is not just *permitted* in scientific explanation, it is *mandatory*. Does Mr. Johnson apply this principle to his own field, the law? Today, legal matters are supposed to be decided rationally, by the evidence and principles of law. In earlier times appeal was made to to divine intervention—via trial by ordeal and trial by combat [for examples]. Would Mr. Johnson have the law return to the same dependence upon miracles that he demands of science?!

Or could it be that he believes in *reason* in a field with which he is qualified or familiar and in *magic* in a field where he is demonstrably ignorant? Believing in miracles is in some ways easier than thinking, and certainly faster.

Bob Trent  
Hardinsburg, KY

~

## Old Earth Creationism

About a year and a half ago I became aware of an organization called "Reasons to Believe," which was founded by Hugh Ross, who has a Ph.D. in astrophysics from the University of Toronto. They publish a quarterly newsletter, *Facts and Faith*. Ross has no problem

believing the Earth and Universe are billions of years old, unlike the ICR people. Nonetheless, Ross and his people are firmly in the evangelical Christian camp and endorse the concept of Biblical inerrancy. They have little, if any, sympathy for the concept of biological evolution or naturalistic origin of life without divine intervention.

They argue against evolution scientifically. Their arguments cite very technical literature and claim that articles in *Nature*, *Science*, *NAS*, etc. disprove the major claims for evolution and especially for naturalistic life origins. Could NCSE analyze these claims so the truth could come out? Why not scholarly and reasoned national TV debates, since the issues are so important? Resolve things in the free and open marketplace of ideas. How could truth lose?

Doug Whiteside  
Belvidere, NJ

*There are very many "Old Earth Creationists," including many who use some of Ross's approaches—some members of the American Scientific Affiliation, for example. NCSE publishes more articles critiquing "Young Earth" claims because they have been the most common ones being thrust at public schools, but we have published many items which do what you propose. In CIE 31, NCSE Exec. Dir. E.C. Scott analyzes the claims and style of lawyer Philip Johnson, demonstrating why legal-style debating is not really appropriate for scientific "debate" which is an ongoing analysis rather than a determi-*

## Chicago *continued from p. 1*

to present all sides of controversial issues to the students. All our teachers have the green light to teach creationism. I know that Mr. Mondy is a creationist and that he has been teaching creationism as science."

Then I called Dr. John Hillary, Director of Curriculum for the high school district. He told me, "I believe that creationism is as much science as evolution [is]. They both can be taught in the science classroom as long as they are presented as theories. We believe that our students are old enough to be given freedom to decide for themselves what to accept as science. Our curriculum is based on what the parents of our students said they wanted and not wanted the students to be taught."

I asked him if he was aware of the recent ruling of the US Court of Appeals for the Chicago District that stated teaching creationism in the public schools was "religious advocacy." He said, "No." I asked him if he was aware that in 1987 the US Supreme Court ruled that teaching creationism in our public schools was unconstitutional. He again said "No." I asked if in astronomy classes, astrology is taught, if in chemistry alchemy is taught, and if in ancient history classes Noah's Flood is taught as an historical occurrence. Dr. Hillary replied, "I don't know if any teachers do so, but if they want to, they can, due to our policy on

controversial issues." At this point he became too hostile to continue and finished by saying, "We're not teaching religion in our schools. We're teaching the creationist theory. Evolution and the Big Bang are just theories, too, and we present all theories to our students."

Mondy has made a videotape in which he portrays two characters, "Professor Evolution and Dr. Creation," debating "origins." He describes this at creationist conferences as "endorsed by the Illinois Science Teachers Association." The September 1988 *Moody* magazine (p.27) uses this phrase, also, but I checked with the ISTA where an official told me they had never endorsed it and definitely would not do so. Mondy *had* advertised it in an ISTA publication, but when they determined its nature refused to accept further paid advertising; perhaps this is the nature of "endorsement" Mondy claims—that they let him advertise until they caught on.

The Chicago ACLU has investigated this situation; in fact, the school officials brag that the only complaint about Mr. Mondy has been from the ACLU, and they couldn't touch him. "It's like any school district in the country," an ACLU official told me. "Nothing can legally be done about this, even though its definitely illegal and unconstitutional, until somebody in the school district has the courage to speak out." □



## While We Were Teaching Evolution . . .

William Thwaites

Department of Biology, San Diego State University

~  
The Vista  
School  
District,  
just north of  
San Diego,  
was  
captured by  
funda-  
mentalists  
~

Many of us in academia think that devoting class time to the evidence for evolution will eventually fix the creationism problem. In the very long run this strictly academic approach might pay off. But the problem for the foreseeable future is political in nature.

The La Mesa/Spring Valley School District just east of San Diego is a case in point. Two years ago a low-profile large-scale effort by the religious right managed to get two candidates on the five member school board (see *Reports* 12(3):1). This year three seats were open and the fundamentalists again had a slate poised to take all three.

But unlike two years ago when the forces of moderation were caught off guard, this time we were ready. Just after the last election a colleague's wife helped found a group called "The Mainstream Voters' Project." It published lists that exposed the endorsements of the religious right candidates. It also researched issues and backgrounds while working closely with the media. Another group with similar goals participated by screening moderate candidates for competence and commitment. This group then published a list of recommended moderate School candidates.

The La Mesa/Spring Valley District had its own committee for moderation. This "Community for Responsible Education" organized the best of the moderate candidates into a slate which pooled its resources and advertized together.

Still other organizations, such as the American Association of University Women, published lists of candidates backed by teachers as well as those identified as religious right. My wife and I walked a precinct, participated in a phone bank, helped organize a meeting for moderate candidates, and wrote letters to the editor of the local paper.

When the election results came in, we found that all three of the moderate slate had been elected. Because of these efforts, a slim majority of the LM/SV board will be adverse to teaching bogus science in the name of religious morality.

But not all the races had a happy ending. The Vista School District, just north of San Diego, was captured by fundamentalists, who included even an employee of the Institute for Creation Research [See *nex issue*].

Now we have to start working on the next election. There *is* hope. The voices of moderation still represent a majority of the electorate. And, yes, we are arguing for logic and reason, but we have one big disadvantage. None of us thinks we will burn in hell if we give up and let them have the public schools. We are not a religion and they are. Our motivation must come from such secular concerns as wishing to remain economically competitive, thinking that humanity is better served by reason than by dogma, and not wanting our country to look silly and superstitious. □

## Discover's Top 50 1992 Science Stories

The January 1993 *Discover* magazine is largely devoted to its annual survey/review of the preceding year's science news. The cover features a rampant sickle-clawed dinosaur and teasers on "closing in on the origin of life," "the flat-faced mystery [earliest *Homo*]," and "creation's uneven glow."

Yes, once again "NCSE topics" seem to have more than their share of newsworthiness!

There are three stories on human evolution, several on evolution-of-the-Universe topics, three dinosaur stories, and items such as the genetics and evolution of sexual orientation, RNA, and AIDS. The discovery of lost Galapagos Islands and three other paleontology articles and a number of items on biology and genetics should also of direct interest to readers.

*Discover's* survey of the past year in science is recommended both for some interesting articles and for a view of what science journalists think has been most interesting in science. [JRC]



## Creationist Bigotry?

Frank Steiger  
Lake Forest, CA

Evangelical creationists such as John Peloza claim to urge "critical thinking." However, they really want unthinking acceptance of their ideology. Some examples:

1. Evangelical creationists claim that there are only *two* possible explanations of origins: atheistic creation by mere chance or creation in strict and literal accordance with the description in the Book of Genesis. They refuse to acknowledge the possibility that God created living things through a process of evolution.
2. They have no reasonable explanation for the cause of the Genesis Flood and the supernatural migration of animals to and from the Ark. Yet they require that this preposterous dogma *must* be accepted and taught as scientific fact.
3. Although all the anti-evolution arguments like moon dust, Earth's magnetic field, Second Law of Thermodynamics, etc., etc., have been repeatedly and conclusively refuted, creationists refuse to respond objectively. Is this critical thinking?
4. They work to eliminate the separation of church and state without considering the consequences. What if the new official church were not theirs? Militant evangelical creationists cannot even get along with the World-Wide Church of God, which has an almost identical ideology, let alone with Catholic, mainline Protestant, Jewish, or other faiths.
5. They claim that teaching evolution leads to a loss of morals and ethics, yet they provide no factual evidence. Believing that someone is immoral just because his religious or philosophical views are different is nothing more than bigotry!
6. They believe that their ideology *promotes* morality and ethical values. But televangelists such as Jimmy Swaggart, Jim Bakker, Robert Tilton, and others, as exposed on ABC's *PrimeTime Live* don't bear out that contention!

The Religious Right has become a rich and powerful political force. At 17 Hughes, Alton, CA, near where I live, the Christian Research Institute has a 24,000

square foot building, which they own. This facility has a full-time staff of 48 to monitor TV and radio programs for "secular humanism," store and ship large quantities of books and tracts, carry out public relations and lobbying, and count the money that pours in from the faithful. It has a state-of-the-art broadcasting facility from which Hank Hanegraff, the "Bible Answer Man," transmits via satellite to radio stations all over the US. This organization is only a small part of a massive, tax-exempt, evangelical political movement in the US. □

## Moab Woman

Some creationists claim a human skeleton from Utah to be the remains of a "giant woman" (from the Biblical days "When giants walked the Earth"). Texas creationist Carl Baugh, Bible-Science Association reports, and C.L. Burdick (Burdick 1973-1974: *Discovery of Human Skeletons in Cretaceous Formation*; *Creation Research Society Quarterly* 10: 109-110) have touted the mystery of ancient "Moab Woman"—did she live side by side with dinosaurs?

Her left humerus bone was submitted to the UCLA Radiocarbon Laboratory for dating. The resulting report is reprinted here from *Radiocarbon* 31(1): 62, 1989:

### UCLA-1942. Moab Woman 210 +/- 70 [years]

Left humerus, copper-impregnated, 15 meters below overburden near Moab. . . . Submitted by L. Ottinger and J.E. Ericson, Univ. California, Irvine. Comment (JEE): deep burial was thought to indicate substantial age, but direct date disproves this theory.

In other words, the burial dates to approximately 1740, a date more recent than even creationists accept for dinosaur fossils and antediluvian giants. (Radiocarbon dates are reported as a number of years "before the present," with a give-or-take calculation of possible statistical error; to confuse the matter for recent dates such as this, "the present" is considered to be 1950—the approximate date of the first radiocarbon dating. This allows all dates to be compared with each other rather than with a "present" which changes from year to year, and it avoids the religious connotations of A.D. or B.C. and has no effect on most dates which are in the multiple hundreds of years or thousands of years; 1740 is almost too recent a date for the technique to be useful, and the result would be read by any archaeologist as meaning "modern.") [JRC]

What if the  
new official  
church were  
not theirs?



## Newspaper Science Sections Disappearing

Science journalism has been a 10-year growth and decline industry. Casualties of the lingering recession are the newspaper science sections which flourished in the 80's.

More than half have been killed in the past 4 years, according to the Scientists' Institute for Public Information *SIPI Scope* 20(1), Fall 1992.

47 science sections are being published now, and almost half of them are reduced in size, often to two pages inside some other section like "Living" or health. Furthermore, many science sections have mutated into "health and fitness" or other domesticized, "household tips" versions of what they once were. Digests of current journal articles and explanations of new research have largely given way to narrowly focused articles on how technology may impact upon middle class lifestyles.

The *New York Times* Science Section, a Tuesday staple, seems to account for one of the best regular sales for that paper, and it has strong advertising support (largely computer sales). Most science sections have low advertising sales, however, and this accountants' rather than editors' policy has been the death knell for many excursions into science journalism.

Recent newspapers to drop science sections include the *Los Angeles Times*, *Chicago Tribune*, *Miami Herald*, *Cincinnati Post*, *Atlanta Journal and Constitution*, *San Francisco Examiner*, *Phoenix Gazette*, *Kansas City Star*, *Seattle Times*, *Houston Chronicle*, and *Westchester/Rockland Newspapers*. The *Oakland Tribune* has just dropped its twice-weekly science and medicine column.

Some of these papers continue to employ excellent science writers, but there is some debate about how much science coverage is possible outside a possible "science ghetto." Many writers think that the result has to be a return to public coverage limited to "gee whiz" new-breakthrough-type stories rather than routine reporting on day to day science matters unable to create big headlines. [JRC]

## Mosaic Magazine Bites the Dust

Volume 23, No. 3, Fall 1992 is the last issue of *Mosaic*, the magazine published by the National Science Foundation. Federal funding cuts forced its elimination. Already cut from bimonthly to quarterly, the last volume was halted after only three issues. Warren Kornberg was editor, and has been with NSF since 1970 (although not always as editor).

Unique among science publications, it attempted to convey to the general public—and especially science writers—the nature and flavor of science under way, not just the gee-whiz summary of results. At its height, circulation only reached 37,000, but it set standards for science and technology journalism, worldwide, and will be sorely missed. The final issue's cover story was "On Equal Treatment of Women in Science" in an 8 page article by Betty Vetter (pp. 34-42). □

## Florida Follow-up

After taking control of Florida's Lake County School Board in September (*Reports* 12(3)), Religious Right activists swept December 1992 GOP county executive elections, reports the *Lake Sentinel* (12/12/92). Carolyn Thompson became Executive Committee Chair, David Leuschner was elected Vice-Chair, Linda Sellars became Treasurer, and Judith Cauthen became Secretary.

Moderate Republicans threatened to form a new party or social club—or to get out of politics. The conservatives attributed their victory to their strict emphasis on "family values" dealing with school and other issues. □

"There is a simple grandeur in the view of life with its powers of growth, assimilation and reproduction, being originally breathed into matter under one or a few forms, and that whilst this planet has gone circling on according to fixed laws, and land and water, in a cycle of change, have gone on replacing each other, that from simple an origin, through the process of gradual selection of infinitesimal changes, endless forms most beautiful and most wonderful have been evolved."

Charles Darwin, 1842  
Conclusion to "Sketch" of Natural  
Selection, later expanded and revised

~  
... death  
knell for  
many  
excursions  
into science  
journalism  
~



## NCSE And PFAW Cooperate On New Textbook Reviews

Eugenie C. Scott

In 1990, NCSE and People for the American Way, the 300,000 member nonpartisan constitutional liberties organization, cooperated in reviewing high school biology textbooks submitted to the state of Texas for adoption. *Biology Textbooks 1990: The New Generation* was published to help Texas teachers and others make informed choices in textbook selection.

In 1992, NCSE and PFAW joined forces again, this time to review 7th and 8th grade science textbooks submitted for adoption in California. Dr. William Thwaites, biology professor at San Diego State University, and NCSE's executive director, Dr. Eugenie C. Scott, reviewed the textbooks and submitted written and oral testimony before the California State Curriculum Commission and the Board of Education during August and September of 1992.

Because of previous controversy over the strong position of evolution in the California Science Framework (see *Reports* 9(6):1, 10(1):10), anti-evolutionist Religious Right organizations such as Lou Sheldon's Traditional Values Coalition, and Robert Simonds' Citizens for Excellence in Education, were expected to have a strong showing at the public hearings, but they did not attend. The dates of the August hearings corresponded closely with the Republican national convention in Houston, at which members of the religious right were prominent. Why Sheldon, Simonds, *et al.* passed up the September public hearing is not known. Perhaps they felt that they had already lost the battle of evolution in the California Science Framework and will be concentrating their efforts at the local level where choices are made among approved books.

The 34 page NCSE/PFAW report, *Have Junior High Science Books Evolved Since 1985?*, is available through NCSE for \$4.50, including postage. It focuses on whether the instructional programs submitted for adoption cover the nature of science (science as a way of knowing) and evolution accurately and sufficiently. Books varied considerably in their ability to meet the stated criteria, but the authors concluded that these books generally were improved over the books submitted seven years ago. Still, much remains to be done to produce accurate and up-to-date textbooks. □

## Vatican Recants; Galileo Cleared

After 13 years' study, on October 31<sup>st</sup> a Vatican panel reported that Galileo had been wrongfully condemned by the Inquisition in 1633. He had written in 1632 about Copernicus's discovery that the Earth rotated about the Sun rather than vice versa. This had already been declared heresy in 1616 because a literal interpretation of scripture required that "God fixed the Earth upon its foundation, not to be moved forever."

Surprisingly, however, the Vatican "pardon" noted that both sides in the dispute had had merit and that Galileo's scientific evidence had been inconclusive. The Church, therefore, was not exactly wrong in hewing to the traditional account in *Genesis* as a good alternative, at the time. The implication of this 1992 decision is that Scripture is quite properly in competition with science.

Pope Urban VIII, a long-time friend of Galileo, allowed the scholar to serve his life sentence under house arrest where he could continue his work. At his trial, Galileo defended himself with the argument that Christian faith and scientific research were not mutually exclusive and that studying the natural world could help one understand Scripture and God's creation. He officially recanted on 30 April 1633, but he is said to have muttered that the Earth *does* move as he rose from kneeling before the Inquisition.

In 1757, Galileo's book, *Dialogue Concerning the Two Chief World Systems*, was removed from the banned-book list by the Catholic Church.

Today there are still geocentrist creationists—in the US they sponsor the Tychonian Society, for example. Other "scientific" creationists reject geocentrism, but they also reject Galileo's argument that science need not bow to Scripture. (Flat Earther's, of course, are even more doctrinaire in their Biblical science. . . .)

The Roman Catholic Church has moved to right an old wrong, but it has been done in a surprisingly tentative, unapologetic fashion. [JRC]

~  
the Earth  
does move  
~

**COMPUTER BULLETIN BOARD.** Back issues of *NCSE Reports* and other material are available via a computer "Bulletin Board"—as a subdivision of FREENET, a Cleveland, OH system hosted by Case-Western Reserve University. It can be reached via local phone calls connecting to many international computer networks such as BITNET, FIDO-NET, USE-NET, etc., or directly at (216) 368-3888.



## NCSE's Ayala Elected AAAS Pres

Francisco Ayala has been elected president of the American Association for the Advancement of Science. President-elect Ayala, an NCSE Supporter, is Distinguished Professor of biological sciences at the University of California-Irvine. Active in promoting evolution education, Ayala has served on the governing council of the National Academy of Sciences and advisory councils of the National Science Foundation, Environmental Protection Agency, and the National Institutes of Health.

During his term as AAAS president, Ayala says he will focus his energies on federal support for investigator-initiated research, K-12 science education and public science literacy, environmental protection, and protection of biological diversity. In the AAAS magazine *Science* (18 December 1992, p. 1963), he said that as "the world's greatest economic power and dominant political force . . . the US should exercise leadership toward enhancing international cooperation in scientific research and technological development." He wants the AAAS to take the lead, since it is "the most representative science and engineering organization the US and the world." □

## Missouri Distinguished Alumnus Award to Genie Scott

NCSE Executive Director Eugenie C. Scott has been chosen to receive the University of Missouri 1993 "Arts and Science Distinguished Alumnus Award."

College Dean Larry D. Clark wrote Scott, "You have distinguished our college with your accomplishments, and your presence at the ceremony will serve as a challenge and a goal to our current students."

The award was voted by the alumni association "with the enthusiastic concurrence of the Dean of the College of Arts and Science." Presentation of the award was scheduled for a February 19, 1993 banquet in Columbia as the culminating event of "Arts and Science Week."

Dr. Scott's service and accomplishments as a teacher, scholar, champion of church/state separation, religious freedom and NCSE leader were among the reasons for her selection for the prize.

Congratulations! □

## NCSE Supporter Rall, Others Report on Health Effects of Mustard Gas and Lewisite

The national Institute of Medicine (IOM) report, *Veterans at Risk: The Health Effects of Mustard Gas and Lewisite*, was released January 6th in Washington, DC. Committee chair and NCSE Supporter David P. Rall and other researchers reported on the health effects on more than 60,000 US servicemen used as human guinea pigs during World War II in order to develop protective agents to thwart the effects of poisonous gasses used widely in WWI. Rall was interviewed at length on *All Things Considered* and called upon the Defense Department to release veterans from secrecy oaths in order to allow treatment and analysis of biological effects.

[JRC]

## Creationists Attack NCSE Supporter Sagan

After many months, creationist Ken Ham may be tired of attacking the late Isaac Asimov. In the December *Acts and Facts*, instead of "Asimov Still Dead!" a successor-demon has been targeted: Carl Sagan! Ham writes a diatribe against Sagan, taking his cue, oddly, from a *Parade Magazine* poll which identified Sagan as the "Smartest Man in America."

Ham turns a flattering public relations note into evidence for a sinister plot by evolutionists to destroy humanity—a task once shouldered by Asimov. He turns the encouraging fact that a self-admitted scientist and intellectual is widely admired into a general threat to the planet's (Christian) soul. Sagan, you see, is an evolutionist, and he believes the Universe is "billions and billions of years" old, says Ham, quoting *Cosmos* (where no such actual quote exists!). Such demonizing of evolution seems funny and desperate—until one realizes the effectiveness and danger of Big Lie anti-intellectualism and that Ham is serious.

So—Congratulations, Carl, on the fulmination level of your enemies. Ken Ham's vitriol is a sort of honor, although it also has its frightening aspects and pathetic aspects, as well.

[JRC]

~  
Parade  
calls Sagan  
"smartest  
man in  
America"  
and ICR  
counter-  
attacks  
~



## New Journal on Evolution Edited by NCSE Member

*Molecular Phylogenetics and Evolution* is a new technical international journal edited by NCSE member Morris Goodman, an anthropologist and Professor in the Department of Anatomy and Cell Biology, Wayne State University School of Medicine, Detroit. The journal's general mission is to advance the understanding of evolution and molecular biology. Its writers address a technical, professional audience. The second issue includes an article on primate evolution of interest to specialists, "Re-examination of the African Hominoid Trichotomy

with Additional Sequences from the Primate B-Globin Gene cluster," by Wendy Bailey, *et al.* It places Gibbons in one group and humans, chimps and gorillas in another, all closely related via DNA analyses. Chimps and humans are tentatively placed in one "subtribe," gorillas in another.

*MPE*, a quarterly, costs US \$148 per year in the US and Canada, \$179/yr elsewhere, from Academic Press, Journal Promotion Dept., 1250 Sixth Avenue, San Diego, CA 92101-9923. □

## Honig *continued from p. 1*

tives, intent, or the putative fact that he did not profit from the situation in question. The *possibility* that he might have profited was ruled to be the only matter in question. Testimony was not allowed which would have demonstrated that QEP brought large amounts of grant money to the California schools in question. "Results" and intentions were ruled inadmissible.

This eliminated the gist of Honig's legal defense, although his attorneys managed to interject such issues occasionally. A long-time Peat-Marwick accounting executive testified that he had found no evidence of diversion of public funds, for example, and that hundreds of thousands of dollars had been brought in via grants.

Jurors were divided initially, but in newspaper interviews it seemed that they had voted "guilty" because of the technical requirements set by the judge. One juror left crying and said she couldn't understand how the Attorney General "could sleep at night" after bringing these technical charges.

Criminal charges were filed about a year ago charging Honig with conflict of interest over the Quality Education Project, a nonprofit effort to improve education by involving parents in school decisions. Honig's wife Nancy was executive director. QEP has received high praise from virtually everyone involved in California public education and from Bush/Reagan administration education policy advisors. Dr. Diane Ravitch, for example, testified at the trial on Honig's behalf, and **prosecution** witnesses volunteered that they knew that Honig's activities were not self-aggrandizing.

"Conflict of interest" cases in California are almost always handled as administrative or civil court issues. Local observers were startled by the decision to charge Honig with *felonies*. However, his opponents viewed the charges as a way of eliminating one of their most effective adversaries from the political process—which they had been unable to do via the ballot box.

Education reformers were aghast at the jury verdict, rendered after only three hours' deliberation. Conservatives and "religious right" critics of Honig policies, on the other hand, rejoiced at having apparently ended his career as a popularly-elected reformer in his second 6-year term as state Superintendent of Public Instruction. California higher education as well as public schools lose a nationally recognized advocate who has fought long and bitterly and usually successfully with conservative-dominated state officers since his election in 1982.

Honig has championed better financial support for all levels of education and made his mark especially in the area of quality standards. Some critics have charged he set standards too high, to the detriment of students who could not master more sophisticated curricula and textbooks, but complaining about his campaign against mediocrity was not always a compelling case for his critics. His steadfast opposition to "scientific" creationism and a clumsy feud with the Institute for Creation Research built up tremendous opposition among conservative critics and contributed to the drive to oust him (*See Reports* 12(1)).

Assuming Honig is removed from office, Republican Governor Pete Wilson will appoint a successor to serve out the remaining year of his term—but that person will

*Honig, continued on p. 15*

~  
Joe Stein,  
State  
School  
Board  
President,  
says "he  
doubts  
evolution is  
fact."  
~



## B o o k s

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# Tracking Those

## Colin Patterson, Cladistics, and Creationists

Eugenie C. Scott

~  
Patterson's  
first  
"axiom" of  
cladistics—  
that  
"features  
shared by  
organisms  
manifest a  
hierarchical  
pattern in  
nature"—is  
true only  
because  
organisms  
evolved  
~

Colin Patterson is an evolutionary biologist at the British Museum of Natural History. Over a decade ago, he became entangled with American creation "science" when he gave a visiting lecture to the systematics discussion group at the American Museum of Natural History. Cladistic taxonomy was all the rage at the AMNH, and the variant, "transformed" cladistics was evolving, with Patterson as a key player. Patterson made some statements that taken out of the context of cladistic taxonomy, might sound anti-evolutionary. The Institute for Creation Research published a tract, "Evolution? Prominent Scientists Reconsiders" in 1982, claiming that at the AMNH speech, Patterson "confessed" that he no longer "believed" in evolution. This claim has been widely circulated due to a clandestine tape transcript of the session.

In Patterson's own words, from a 1982 letter to teacher Steven Binkley,

I was asked to talk on "evolutionism and creationism," and knowing the meetings of the group as informal sessions where ideas could be kicked around among specialists, I put a case for difficulties and problems with evolution, specifically in the field of systematics.

Note: he was talking to *specialists* about *systematics*. Cladistics is an approach to systematics and taxonomy that has become quite popular in evolutionary biology because it allows for more testable and hopefully accurate phylogenies. Cladistics descends from Willi Hennig's *Phylogenetic Systematics*. As Hennig's title implies, cladistics is fundamentally a way of looking at evolution. This point is important because anti-evolutionists (such as Phillip Johnson and Tom Bethell) have tried to portray cladistics as an anti-evolutionary endeavor. This could not be farther off the mark.

In a cladistic analysis, the investigator is concerned, among other things, in the formation of "sister groups," pairs of taxa that share a common ancestor with each other more recently than with any other taxon. In identifying sister groups, Hennig suggested differentiating between traits that were inherited from a common ancestor ("primitive traits") and traits acquired since the split from a common ancestor ("derived" traits). Determining shared, derived

traits is an essential method of studying the patterns of evolutionary history.

*Transformed* cladistics is a variant of cladistics, and not all cladists subscribe to it. Patterson is a "transformed" cladist. Ordinary cladistics assumes that evolution has occurred. Transformed cladistics tries to minimize ad hoc assumptions about the patterns and processes of evolution, including the fact of evolution itself. *This is not the same thing as saying that evolution did not occur.* It is merely a difference between the approaches of two schools of reconstructing relationships.

"Transformed cladistics" is not without its critics. John Maynard-Smith summarizes the position—and essential problem—of "transformed" cladistics so well, he should be quoted in full:

(Cladists) have discovered that Hennig's procedures for constructing "cladograms" (trees representing relationships) can be carried out quite satisfactorily without thinking about evolution. From this, they conclude that maybe evolution is not a necessary hypothesis in biology, and that evolutionary arguments are "mere rhetoric."

Now it is obviously true that one can apply Hennig's methods without thinking about evolution. It is also true that one can drive a motor car without understanding how internal combustion engines work. However, if internal combustion engines didn't work, one would not be able to drive cars, and if evolution hadn't happened one would not be able to apply Hennig's methods successfully. It is not merely that the concepts of sister group, and of primitive and derived traits, make little sense in the absence of an evolutionary hypothesis. The crucial point is that Patterson's first "axiom" of cladistics—that "features shared by organisms manifest a hierarchical pattern in nature"—is true only because organisms evolved (Maynard-Smith, 1982:108-109).

Patterson continues in the letter to Binkley:

I was too naive and foolish to guess what might happen: the talk was taped by a creationist who passed the tape to Luther Sunderland. . . .



# Incredible Creationists

Since, in my view, the tape was obtained unethically, I asked Sunderland to stop circulating the transcript, but of course to no effect. There is not much point in my going through the article point by point. I was putting a case for discussion, as I thought off the record, *and was speaking only about systematics, a specialized field.* (italics not in original) I do not support the creationist movement in any way, and in particular I am opposed to their efforts to modify school curricula. In short, the article does not fairly represent my views. But even if it did, so what? The issue should be resolved by rational discussion, and not by quoting "authorities," which seems to be the creationists' principal mode of argument.

So Patterson was tossing around ideas to a group of students and specialists about a specialized subfield, transformed cladistics. The specialized nature of the discussion and the particular philosophical context of the statements were ripe for taking words out of context. Patterson has not "reconsidered" whether evolution has taken place, he is arguing about how to work out relationships between organisms.

Patterson himself, responding to a creationist misquotation, said:

Chelvam asserts that "we are drowning" in evidence against darwinism. He cites nothing beyond the remarks attributed to me. It seems possible that he confuses two theories under the name of darwinism, the general theory of common ancestry or descent with modification, and Darwin's special theory of mechanism, natural selection. If he knows of evidence inconsistent with the general theory of common descent, he should tell us what it is. I know of none. (1988)

The "Patterson story" illustrates two common creationist enthusiasms: taking statements out of context, and refusing to recognize corrections when made. Patterson's letter to Binkley and other commentary from him have been accessible since 1984 and 1985 (*Creation/Evolution Newsletter*, 4(6):4-5; 5(5):4-5).

## References:

- Maynard-Smith, John. 1982. The pattern of Nature. in Maynard-Smith, ed: *Evolution Now: A Century After Darwin*. San Francisco: W.H. Freeman and Co.  
Letter from Colin Patterson to Steven W. Binkley, June 17, 1982  
Patterson, C. 1988. Letter to the editor. *Nature* 332:580.

*Eugenie C. Scott, a physical anthropologist, is Executive Director of the National Center for Science Education.* □

~  
I do not support the creationist movement in any way, and in particular I am opposed to their efforts to modify school curricula.  
~

## Honig *continued from p. 11*

have to be approved by the Democratic state legislature. Democrats initially were demanding that another Democrat be nominated. Appointment of an outright "scientific" creationist candidate is unlikely, but a much more conservative successor is predicted, and any successor will be chastened by the example of the violent, take-no-hostages opposition to Honig.

Opponents on the state Board of Education want to roll back Honig's policies on "teaching evolution as if it were science," sex education, making textbooks more rigorous, and involving academics and parents in school policies. The Board is now dominated by Honig opponents—and opponents to his policies, more to the point.

Some Honig allies were critical of his apparent political naivete. They considered his efforts well-intentioned but open to the charges brought against him. Since he was obviously a lightning rod for potential complaints, any involvement with a private effort such as QEP was

potentially incendiary—his wife did draw a salary from QEP, for example.

Honig was charged with using his office to promote his wife's organization, thus benefitting financially from the non-profit's success. Specifically, he was accused of contracting out four public employees to QEP, at a cost of \$337,509 (*San Francisco Chronicle* 1/1/93). Honig's office says the four employees were on unpaid leave.

QEP funds came from federal and private grants, including over \$1.9 million from the US Department of Education. In December 1992, the USDE announced it would not seek the return of the funds it granted QEP. The California State Board of Education investigated the charges of conflict of interest and declined to bring charges, as did the Fair Political Practices Commission. However, Board President Joe Stein persuaded the

*Honig, continued on p. 23*



# Resources

*Listing items here or offering to distribute them does not imply NCSE endorsement or agreement; annotations are by the editor or various contributors.*

"SASE" = "Self-Addressed Stamped Envelope"

Albert, Michael. 1992. Not All Stories Are Just Stories. *Z Papers* 1(4): 39-51. A detailed response to numerous critics of science and rationalism as being racist, colonialist, sexist, etc.

Albert, Victor A., S.E. Williams and M.W. Chase. 1992. Carnivorous Plants: Phylogeny and Structural Evolution. *Science* 257: 1491-1495, 11 September. Technical paper.

Anonymous. 1992. Give them the Tools. . . . *Mosaic* 23(3): 12-21, Fall. Science education technology moves beyond gadgets, and computers get serious.

Barlow, C., and P. Volk. 1992. Gaia and Evolutionary Biology. *BioScience* 42(9): 688-692. Review and critique of the Gaia Hypothesis.

Caldwell, M. 1992. How Does a Single Cell Become a Whole Body? *Discover* 13(11): 86-93, November. Latest on animal development.

Chomsky, Noam. 1992. Rationality/Science. *Z Papers* 1(4): 52-58. A Chomsky defense of science and rationality against attacks by fellow leftists.

Clermont, Norman, and J.F. Thackeray. 1992. On the Piltdown Joker and Accomplice: A French Con-

nection? *Current Anthropology* 33(5): 587-589. Two comments on an earlier article by P.V. Tobias; more on the endlessly juicy topic.

Clube, Victor, and Bill Napier. 1991. *The Cosmic Winter*. Oxford: Basil Blackwell. £15.95, cloth. "A challenge to orthodoxy," says reviewer Martin Leech in *Astronomy Now*. Argues that major comet impacts as recent as 4-5000 years ago have continued a pattern of intermittent bombardment far beyond that advocated by Alvarez, Sagan, Raup, and others.

Conroy, G.C. 1992. Closing the Hominid Gap. *Nature* 360: 393-394. Review of Leakey and Lewin's *Origins Reconsidered*.

Cronin, Helena. 1992. *The Ant and the Peacock: Altruism and Sexual Selection from Darwin to Today*. Cambridge: Cambridge University Press. 490 pp., \$39.50. Author calls "selectionism" the totality of "modern Darwinism." Not everyone agrees, since Darwinism, in the vernacular, is typically used to mean evolution of all sorts, building on Darwin.

Dean, D., and E. Delson. 1992. Second Gorilla or Third Chimp? *Nature* 359: 676-677. Latest thinking on the relationships between gorilla, chimps and humans.

Ehrenreich, Barbara. 1992. Truth, Justice and the Left. *Z Papers* 1(4): 59-64. Rationalism isn't sexist or ethnocentric.

ERIC. 1992. *Teaching Mathematics Effectively and Equitably to Females*. ERIC Clearinghouse on Education, Box 40, Teachers College, Columbia University, NY, NY 10027. How female students can be encouraged to pursue math beyond intro courses. \$5.00 from ERIC.

Escalante, Jaime. 1990. *The Jaime Escalante Math Program*. NEA Communications (attn: Charles Ericksen), 1201 16th St, NW, Washington, DC 20036 (202-822-7228). FREE 16 pp. booklet on teaching science and math by the renowned ("Stand and Deliver") math teacher.

Gould, Stephen J. 1992. The Confusion over Evolution. *New York Review of Books* 34(19): 47-55, 19 November. Gould reviews Cronin book (above) and explains his views on both her radical natural selectionism & R. Dawkins'; praises Eldredge's *The Miner's Canary* [See centerfold] and Ward (below).

## Oasis Newsletter

Canadians face many of the same anti-evolutionist pressures suffered by their friends south of the border. *OASIS Newsletter*, edited by J. Richard Wakefield, is published by the Ontario Association for the Support of Integrity in Science Education, (OASIS), Box 617, Beaverton, Ontario, Canada LOK 1A0, \$10/yr Canadian, \$15/yr US.

The Summer *ON* 5.1, Number 14, includes 26 pp.; "A Creationist Looks at Living Fossils" [Margaret Helder], "DNA, Chromosomes and Human Evolution" [H. Helmuth], "The Equal Time Argument" [D. Renault], and "Did Darwin Plagiarize Lamarck?" [Michael Ruse], plus news articles, comments on recent "Big Bang" claims, letters, etc. [JRC]



# Resources

Gould, Stephen J. 1992. What is a Species? *Discover* 13(12): 40-44, December. Good review of the concept.

Grabiner, Judith. 1992. The Use and Abuse of Statistics in the "Real World." *The Skeptic* 1(2):14-21, Summer. Good explanation of stats for the nonspecialist—and for teachers and scientists not used to explaining these things when needed. **Available from NCSE for SASE+\$1.60.**

Gray, J., and W. Shear. 1992. Early Life on Land. *American Scientist* 80(5): 444-456. Minute fossils indicate that life invaded land millions of years earlier than previously thought.

Henbest, N. 1992. Gregarious Galaxies. *New Scientist* 135(1840): 26-30. Evolution of galaxies.

Hughes, D. 1992. Where Planets Boldly Grow. *New Scientist* 136(1851): 29-33, 12 December. How many stars have planets, and what are the systems like?

Klutz Editors, H.B. Lewis and Sara Moore. 1992. *Kids Shenanigans: Things to Do That Mom and Dad Will Just Barely Approve of*. Palo Alto: Klutz Press. Spiralbound, incl. Whoopie Cushion kit, \$13.95. About 30 activities for adolescents which illustrate science & technology principles subversively—while sometimes grossing out parental units (example: real bloody finger in a box).

Knight, John. 1985. Creation-Science, Evolution-Science, and Education: Anything Goes? *Australian Journal of Education* 29(2): 115-132. Analysis of creationism in Australia; 7 years ago but still a good resource.

Krause, Richard M. 1992. The Origin of Plagues: Old and New. *Science* 257:1073-1078, 21 August. Origins and evolution debates in epidemiology.

Neu, Harold C. 1992. The Crisis in Antibiotic Resistance. *Science* 257: 1064-1073, 21 August. Review article on bacterial evolution (and the danger it poses).

Nisbet, E.G. 1992. Differing World Views. *Nature* 360: 390-391. Review of Dalrymple's *The Age of the Earth* [See centerfold] and Milton's *The Facts of Life: Shattering the Myths of Darwinism*. Milton is an evolution-basher ala Macbeth, Hitching, Johnson, Rifkin, etc.

Radetsky, P. 1992. How Did Life Start? *Discover* 13(11): 74-82. Did it occur in hydrothermal vents?

Ross, Hugh, and Walter Bradley. 1992. Theories on Life Origin Take New Directions. *Facts and Faith* 6(4): 2-3. Old Earth creationist critique of RNA and thermal vent, biogenesis proposals. A burgeoning new anti-evolution group's article.

Ruse, Michael. 1989 (orig. 1987). *Taking Darwin Seriously*. Oxford: Basil Blackwell. 318 pp., pb., \$15.95. Outstanding survey of the evolution of evolution as a philosophical concept.

Shapiro, Arthur M. 1987. God and Science. *The Pennsylvania Gazette*, October, pp. 47-51. A biologist ruminates on creationism, evolution and the meaning of science. **SASE+\$0.50 from NCSE.**

Stearns, Stephen C. 1992. *The Evolution of Life Histories*. NY: Oxford University Press. xii+249

## FREE RESOURCES—NEW SOURCE

### BSCS Now Distributes "Science as a Way of Knowing"

*Science as a Way of Knowing* is a series of seven volumes designed to be background information for introductory biology teachers. NCSE has touted them before when they were distributed by the American Society of Zoologists.

Now they are being distributed by the Biological Sciences Curriculum Study (BSCS) free of charge thanks to a grant from the Carnegie Corporation. Titles are:

- I. *Evolutionary Biology* (1983)
- II. *Human Ecology* (1984)
- III. *Genetics* (1985)
- IV. *Developmental Biology* (1986)
- V. *Form and Function* (1987)
- VI. *Cell and Molecular Biology* (1988)
- VII. *Neurobiology and Behavior* (1989, 1990, two parts)

A \$3.00 shipping fee is requested for both volumes IV and VII, however (i.e., \$3.00@). Order from (and make checks payable to, for IV and VII—no purchase orders accepted): BSCS, 830 North Tejon Street, Suite 405, Colorado Springs, CO 80903.



# Resources

pp., Pb. \$29.95. Technical book evaluates the making of the "grand synthesis" in evolutionary biology and the reaction against "adaptationism" as the sole theme for evolution.

Stevenson, Harold W. 1992. Learning from Asian Schools. *Scientific American* 267(6): 70-77. Effective "foreign" classroom techniques, many developed in the US but little-used here.

Stevenson, Harold W., Chuansheng Chen and Shin-Ying Lee. 1993. Mathematics Achievement of Chinese, Japanese and American Children: Ten Years Later. *Science* 259: 53-58, 1 January. American students and parents are highly satisfied with student performance and school curricula, even though they know how poorly they compare with other countries, raising serious questions about support for school reform. Innate ability rather than hard work is cited by Americans as the key to success, contrary to Asian counterparts' views.

Tattersall, Ian. 1993. Madagascar's Lemurs. *Scientific American* 268(1): 110-117, January. To understand human ancestors, study lemur evolution; many species are already extinct, and habitat destruction is pressing survivors to the brink. Many illustrations, incl. reconstructed fossil forms drawn with advice of NCSE's L. Godfrey.

Thompson, K.S. 1992. The Challenge of Human Origins. *American Scientist* 80(6): 519-522. Mitochondrial Eve replacement hypothesis vs. the multi-regional hypothesis.

Tunncliffe, V. 1992. Hydrothermal-Vent Communities of the Deep Sea. *American Scientist* 80(4): 336-349.

Ward, Peter Douglas. 1992. *On Methuselah's Trail: Living Fossils and the Great Extinctions*. San Francisco: W.H. Freeman. 212 pp., \$18.95. Praised by Gould as a good study of mass extinctions.

Wells, William G., Jr. 1992. *Working with Congress. A Practical Guide for Scientists and Engineers*. Washington: AAAS, 1333 "H" St, NW, Washington, DC 20005. \$12.95. From testifying, writing letters, to just understanding the way govt works.

York, Derek. 1993. The Earliest History of the Earth. *Scientific American* 268(1): 90-96, January. Prying into the first billion and a half years of Earth's existence. □

**Darwin. Interactive HyperCard Stack Program** published by Chariot Software for Apple Macintosh computers (not IBMs or clones). \$29.95. from computer dealers or (619) 298-0202.

Reviewed by Frank L. Fire, Jr.  
Akron, OH

I'm a firefighter/paramedic with a few years of formal education in biology. I have been interested in the creation-evolution controversy for several years and have built up an extensive library on the subject—including the Macintosh computer program mentioned in *NCSE Reports* 12(2), *Darwin*.

The program is extremely interesting, informative and easy to use. It covers not only Darwin's ideas but also gives background on 19th century England, an overview of geology and biology, some historical conflicts caused by Darwin's ideas, an outline of current creationist thought, and even a board game between Thomas Huxley and Bishop Wilberforce! (Huxley doesn't always win!)

Included also are an informative bibliography, a chronology, a glossary, and a set of note cards for the user. Information is presented in a format that makes it very easy to leave the page you are reading on screen and get further information on any subject and then return to your place instantly.

Chariot software also has a program called *Evolution*, which I look forward to receiving shortly and would be happy to report on in the future.

Note: This is *not* the CD-ROM program, *Darwin*, reviewed in *Reports* 12(3)—a more expensive and ambitious program with different uses.

## Jehovah's Witnesses President Dies

Frederick W. Franz died on December 22nd at his office in Brooklyn. He was 99 years old and had been president of the Watch Tower and Bible Tract Society since 1977. His organization's door-to-door "witnessing" is probably the world's most frequent contact with creationist publication and "testimony," but the organization has been basically just anti-evolutionist, not very active in classroom equal-time debates.



# Keeping Tabs

## "Scientific" Creationism on Another Planet

"Nightfall," published in 1941 by Isaac Asimov, was voted best science fiction story of all time by the Science Fiction Writers of America a few years ago. Compare the following short excerpt with statements from today's creationists. (Set on a distant planet with multiple suns, the tale is about a doomsday cult with a sacred 'Book of Revelations' which aims to sabotage research which might scientifically explain the archaeological evidence of cyclical rises of civilization followed by sudden collapses. The keepers of the secret myths worry they will lose power if science is allowed to provide materialistic explanations of the mystery. In the process they reveal the problem of confusing science and theology.)

[Aton, the astronomer, said] "I have fulfilled my end of the bargain. . . . I promised to prove the essential truth of the creed of the Cult."

"There was no need to prove that," came the proud retort. "It stands proven by the 'Book of Revelations.' "

"For the handful that constitute the Cult, yes. Don't pretend to mistake my meaning. I offered to present scientific backing for your beliefs. And I did!"

The Cultist's eyes narrowed bitterly. "Yes, you did, with a fox's subtlety, for your pretended explanation backed our beliefs, and at the same time removed all necessity for them. You made of the Darkness and of the Stars a natural phenomenon, and removed all its real significance. That was blasphemy."

"If so, the fault isn't mine. The facts exist. What can I do but state them?"

"Your 'facts' are a fraud and delusion."

Aton stamped angrily, "How do *you* know?"

And the answer came with the certainty of absolute faith. "I *know*!"

Meanwhile, back in *this* galaxy:

The *Lexington Herald-Leader* (Ky.) of 10 October 1992 quotes Walter Lang, B-SA founder and currently director of the Genesis Institute in Richfield, MN: "They [most Christians, especially scientists and environmentalists] put nature ahead of the teachings of Scripture, even though they may call themselves evangelical Christians. It's essentially a worship of nature rather than a worship of its Creator." When the Bible and science conflict, science is wrong, Lang said. To be accurate, science must bow absolutely to the correction of Scripture. [JRC]

## Is the "Big Bang" Anticomunist?

Creationists have exploded for months about new claims by astrophysicists to have verified the "Big Bang" theory of cosmogenesis. They have objected that this usurps God's role and is blasphemous, and they argue that we did not actually observe it first-hand, so it can't be science.

This latter argument is often called "Baconian" because Francis Bacon proposed that, among other things, science should be limited to what could be directly, physically observed. Science has long outgrown this view, but it still is a favorite among creationists.

Less well known is that some *Marxists* make a similar argument. In "Big Bang 'Creationism'" Lester Talkington argued that the "Big Bang" lacks physical probability, is unobservable, violates scientific laws, and contributes to the "mystification" of science. It encourages mystical or religious thinking rather than materialism (*Science and Nature* 6: 3-5, 1983). Further debate in that journal ensued (1986, (7/8): 91-100). In a long response to his critics, Talkington (p.98) wrote, "The Marxist approach to cosmology would be, it seems to me, to start by acknowledging that we do not now and may never have any basis for precise (absolute) knowledge of any beginning whatever. [As Lenin writes in "Materialism and Emperio-Criticism," (1908)], 'nature is infinite . . . it infinitely exists.' A materialist cosmology would not give so much credence to a vast theoretical structure erected on the sands of changing interpretations. . . ."

"Most of the content of this discussion . . .," Talkington adds, "is based on my 30-year collection of notes, reprints and clippings on anything anomalous in the scientific literature or popular press" (p.99).

For years "scientific" creationists have attacked evolutionists, Big Bang advocates, and the like of either being communists or teaching a view which leads to "evil fruits" such as communism. Furthermore, they typically have used the tactic of marshaling anomalous quotes and clippings to prove their case. My obscure research, reported here, seems to argue just the opposite—that the evil roots of humanistic science lead to creationism! Does this imply that "scientific" creationism is the last thriving outpost of communism? [attn: Thin-skinned ICR members—This is just sarcasm!] [JRC]

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To be accurate, science must bow absolutely to the correction of Scripture.  
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# Keeping Tabs

## Texas Symposium on Darwin: Challenge from Foundation for Thought and Ethics—and Phillip Johnson

K. John Morrow, Jr.

Dept of Biochemistry and Molecular Biology  
Texas Tech University Health Science Center, Lubbock, TX

In March 1992 I took part in a Dallas symposium, “Darwinism, Scientific Inference or Philosophical Preference?” The conference, set in a debate format, was a singular experience for me. Most scientists, although they may do a great deal of public speaking on their specialties, rarely are called upon to defend their views in front of an audience which potentially shares few of their basic premises. When fate thrust this charge upon me, I was forced to reassess the nature of my adherence to the theory of evolution.

My invitation, from Jon Buell, Director of the Foundation for Thought and Ethics, resulted from my earlier conversation with Thomas Woodward, a philosophy professor at Trinity College, Florida. Woodward had contacted me concerning some harsh words I had spoken regarding his talk at Texas Tech. To my surprise, he turned out to be an affable and educated individual, and while we didn’t agree on everything, I didn’t wind up ripping the phone out of the wall. The result of this self-restraint was an invitation, received with trepidation, to take part in the FTE symposium.

FTE is a rather conservative-oriented Christian think-tank in Dallas. It struck me as a mom-and-pop operation; Jon Buell, his wife, and daughter were indefatigable, loquacious and ubiquitous at the meeting. The symposium was at Southern Methodist University, much to the consternation of the biology faculty who, I think, found the idea of debating Darwinism on campus about as welcome as Ralph Nader at a General Motors board meeting.

The symposium began with a rousing talk by UC-Berkeley law professor Phillip Johnson, author of *Darwinism on Trial*. He has no formal training in biology, and all his academic credentials are in the legal realm. He is an energetic and polished speaker and obviously quite bright. I’m not sure what his motivation is. Why anyone in middle age would want to embark upon a completely unrelated, highly technical academic discipline after having established a credible record as a scholar in one area is difficult for me to understand. Moreover, Johnson’s campaign to rid science of the error of evolution has

forced him to endure the unmitigated sarcasm of his university colleagues.

But this opprobrium seems to fall off Johnson like water off a duck’s back, and he appears to be having the time of his life being the *bete noir* of evolutionary gatherings. At the conference, he suggested that his role as gadfly was reward enough. While he may have additional motivations, I’m sure that it is much more entertaining to be embroiled in controversy than to be writing stuffy articles for law journals.

Can I summarize what Johnson believes? Not without difficulty, because his views are complex and not always internally consistent. However, I believe he speaks for a broad group of conservative Christian academics, and it behooves biologists to take note rather than to dismiss them out of hand. They certainly don’t belong to the “flat-earthers” at the Institute for Creation Research who seem to think the fossil record was insinuated into rocks by a nasty little demon in order to tempt the ungodly. In fact, Johnson didn’t seem to have much patience with the Gish and Morris crowd in San Diego.

Johnson appears willing to accept the basic picture of the universe portrayed by modern science—until he comes to biology. The core of his argument is that the Earth is very old, that fossils exist, that microevolution does occur—but natural selection lacks the creative force necessary to produce the wealth of diversity among living creatures. Thus Johnson argues for a universe ruled by an intelligent, guiding presence who intervenes on a day-to-day level and can produce species when and if He feels like it. He also argues that such a belief can be established on the basis of rational argument rather than by faith alone. He does not offer an alternative to evolution aside from fuzzy ideas about divine force guiding the assembly of living systems.

Johnson has been criticized for lacking a solid understanding of biological facts, and a lot of his iconoclastic efforts seem aimed at issues long ago resolved, such as gaps in the fossil record and whether microevolution is the equivalent to macroevolution but on a smaller scale. Stephen Jay Gould argues in a *Scientific American* (July

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# Keeping Tabs

1992) book review that Johnson's book is basically a badly done rehash of outdated arguments. Johnson responds to critics by accusing them of nitpicking and unwillingness to deal with the inherent contradictions of Darwinism.

At the FTE symposium all of the papers dealt with technical issues in evolution, and none demanded adherence to any particular religious persuasion. One of the most interesting was by Leslie Johnson (no relation) of Princeton University who discussed the evolution of terrestrial iguanas on the Galapagos Islands. There are several species which diverged from an aquatic ancestor that swam from the mainland about 15 mya. But the present Galapagos have only existed for about 3 million years. These data argue for a much older range of now-submerged islands in the same chain—which have recently been confirmed by researchers. Thus the theory of evolution does exactly what a good scientific theory should do: it makes predictions subject to testing and, in this case, confirmation.

It was gratifying to see the Friday night debate between Johnson and Michael Ruse, the history and philosophy of science professor (and NCSE Supporter) from Canada's University of Guelph. There was a crowd of 500 or more, and from the Q&A session I would judge that it generated a lot of student excitement. The question period went on long after the formal presentation and at times became quite heated. Ruse did a fine job, but I thought he did not address what I thought were the two major issues: whether Johnson had his science right, and whether a thoughtful person can believe simultaneously in the theory of evolution and Christianity. The latter, especially, seems to be a major factor in Johnson's public appeal.

My positive feelings about the symposium outweighed my apprehensions. The operation was well-managed, the hosts unfailingly courteous, the discussion carried out on an intellectual plane. Participants appeared to be genuinely committed to establishing their views on the basis of logical discourse. I believe the people at the mysterious Foundation are sincere and honestly trying to develop a dialogue.

The bottom line is, of course, the whole issue of the theory of evolution. Are mechanistic explanations adequate to account for the diversity of life? Did today's species result from random mutation, variation and selection? I'm convinced that they did, but I'm willing to admit that thoughtful people with a strong prejudice toward an ordered universe presided over by an omniscient Creator might honestly have difficulty accepting

what seems obvious to me. The FTE is convinced that evolutionary theory is invalid and that in an open forum they will prevail. Most evolutionary biologists hold the opposite view, and many would argue that debating the issue is fruitless and only serves to add stature to intellectually bankrupt issues.

Unfortunately, there are few opportunities for average people to hear these propositions considered outside a college classroom. People who sit on school boards, who decide the content of textbooks, and who elect officials have probably not been exposed to a well-argued presentation of evolution since they themselves were in college (if then). Biologists have to face the actuality that if they want any opportunity to present their views, they will have to do so in a forum which may dignify individuals or philosophies for which they harbor little sympathy.

This is the reality of the challenge we face. □

## Center of Creation?

*The Boston Globe Magazine* (6 December 1992, p.12) asked astronomer Carl Sagan about a book which "asserts that science has continually belittled man's place in the Universe, that science has made mankind feel less and less significant."

Sagan replied, "But the question is: Shall we accept a comfortable lie or embrace the uncomfortable truth? . . . And so, yes, if your self-worth comes from being at the center of the Universe, then science will make you uncomfortable. If your self-worth comes from other things, then science won't bother you."

Too few people probably think about science as rationally as this, but Sagan shines a spotlight on a major motive and appeal of "scientific" creationism. □

## Noah's Archeology in Oregon

A conference of ark-fans was scheduled for 29-31 January in Portland, Oregon. Speakers included the Institute for Creation Research's long-time ark-tracker John Morris, Walter Lang (a founder of the Bible-Science Association), John Baumgardner, Bill Crouse, and Charles Willis. Registration was \$185 "to rub shoulders with veteran researchers." Anyone interested should call C. Allen Roy at 503-777-8347, not NCSE.

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". . . if your self-worth comes from being at the center of the Universe, then science will make you uncomfortable. If your self-worth comes from other things, then science won't bother you."  
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# Keeping Tabs

## CBS "Documentary" Touts Scientific Creationism

On February 20th, CBS television broadcast a two hour show entitled *The Incredible Discovery of Noah's Ark*. Narrated by actor Darren McGavin, the production relied almost totally upon "scientific" creationists as interviewees and as technical consultants. The program concluded that the ark has been found, but of more concern, it was a non-stop presentation of young earth creationism as if it were established scientific fact and a more than equal in a debate with out-of-it evolutionary biology, geology and normal science. "Experts" consulted included Henry Morris, John Morris, Tim LaHaye and others associated with the Institute for Creation Research and Walter Brown and Carl Baugh, self-proclaimed "paleontologist" associated with Texas "Mantrack" claims from which even the ICR has distanced itself. Brown described how continental drift happened in a single day, brought on by the Flood (water from inside the Earth, the "vapor canopy," and oceans combined to create a force equal to thousands of hydrogen bombs, you see).

NCSE is very concerned about this blatant pseudo-science and is in touch with CBS and other organizations. We do not advocate censorship but deplore fraudulent claims. Tapes of this program are being sold for \$30, and we wonder if they will show up soon in classrooms and school board and curriculum hearings. Please keep your eyes open for such appearances and let NCSE know. If you saw the broadcast, you may want to contact your local CBS affiliate, the national network, the FCC, and local media to express your concern about this promotion of bad science. More on this next issue. [JRC]

## Other People's Ark

The September 1992 *Acts and Facts Impact Series*, #213, published by the Institute for Creation Research, is written by John D. Morris, who has spent considerable time and we assume money searching for the Ark over the last 22 years. In this *Impact* statement, he discusses recent claims of the discovery of the resting place of the Ark by two non-ICR "arkaeologists," Ron Wyatt and David Fasold. Suffice to say that even Morris, an Ark enthusiast if there ever was one, finds no grounds in these recent Ark claims, either.

But what is perhaps an unusually revealing statement occurs at the very beginning of the article in a discussion of how eyewitness reports of Ark discoveries have proliferated since the 1940's.

Unfortunately, none of these accounts have been substantiated by documentation. Thus, all are to some degree questionable, and each should be held lightly. It can rightly be said that without these "eyewitness" reports, *there would be no reason to look for the Ark, for the Bible contains no prophecy that it would be found.* (my italics.)

Apparently, according to Morris, if it isn't in the Bible, it isn't worth exploring. So much for the notion of empirically-based scientific exploration. T.H. Huxley said it best, "The improver of natural knowledge absolutely refuses to acknowledge authority, as such. For him, skepticism is the highest of duties; blind faith, the one unpardonable sin." [Eugenie C. Scott]

## End of the World in Sight?

"I have read the Book of Revelation, and yes, I believe the world is going to end—by an act of God, I hope—but every day I think that time is running out."

Former Secretary of Defense  
Caspar Weinberger, 1982.

"I do not know how many future generations we can count on before the Lord returns."

Former Interior Secretary James Watt  
at his 1981 Senate confirmation hearings.

Above from Paul Boyer's 1992 book *When Time Shall Be No More; Prophecy Belief in Modern American Culture* (Cambridge: Harvard University Press), quoted in *Science* 258: 1506, 27 November 1992.

Also, according to the Mayan calendar, the Universe comes to an end again in 19 years. Bad news if you have an IRA account. But the Universe has done this a possibly infinite number of times, only to start again, so the current generation is not really being picked on or punished. [JRC]

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Mayan  
astronomers  
pinpoint the  
most recent  
re-start at  
5105 B.P.  
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## Evolution and the Nature of Science Institutes

Eight regional "Evolution and the Nature of Science" programs will be offered to experienced teachers in 1993, and a Summer Institute will again be offered at Indiana University in Bloomington. Sponsored by the National Science Foundation, this project was initiated by NCSE sponsorship of the grant proposals in the writing stage. NCSE provided funding to principal investigators Dr. Jean Beard and Dr. Craig Nelson, direct technical aid in the grant-writing stage, and connections with our network of other educators.

Teachers participating in the 2-week programs and two 1-day follow-ups receive stipends and materials as well as direct training by scientists and master teachers. They then return to home communities and act as resource persons for further impact on science education.

Teachers are encouraged to apply in pairs or teams from individual districts so that they may share their training better when they return to their school systems. Applicants should have a minimum of three years' teaching experience,

anticipate continuing to teach biology, and to have shown leadership potential.

The 1993 schedule:

- San Jose State University, CA: 5-23 July (with two 2-day follow-ups)
- Greater Detroit: South Lyon HS, 21 June-2 July
- Greater Cleveland: Cleveland Metroparks Zoo, 21 June-2 July
- North Central Ohio: Fremont H.S., 14-25 June
- Central Ohio: Dublin HS, 21 June-2 July
- Northwest Indiana: Indiana University, South Bend, 14-25 June
- Greater Indianapolis: Indiana U-Purdue U, 19-30 July
- Greater Louisville, KY, site tba: 12-23 July
- West Central Illinois: Jacksonville HS, 21 June-2 July
- Greater San Diego, site tba: 19-30 July

For a list of contact persons and other information, write Dr. Jean Beard, Biology Dept, San Jose State University, San Jose, CA 95192-0100; call (408) 924-4870.

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## Honig *continued from p. 15*

State Attorney General to investigate and bring charges, anyway. Like Stein, Attorney General Lungren is a conservative Republican and long a critic of Honig, a Democrat and education reformer prominent nationally for his success since 1982 in improving textbook quality, science and especially evolution education, and introducing new and more rigorous state curricula. Stein, on the other hand, states that "he doubts evolution is fact" (*S.F. Chronicle* 1/1/93).

"No money ever went from this department to QEP," Honig said (*NY Times* 1/7/93). "No money went from school districts. This is such a ploy of the right wing."

Honig and his defenders maintain that he is being prosecuted by political opponents, led by School Board President Joe Stein and leading creationists and Christian Coalition advocates opposed to his policies. Honig, an elected official, has been one of the national leaders of education reform and has

stirred extreme hostility among conservatives despite his popular elections.

The trial judge ruled on the first day of trial that Honig could not present evidence that QEP did not benefit financially from Honig's help or that QEP brought benefits to schools rather than costing them money. "This is mind-boggling," said his attorney Hugh Levine (*San Francisco Chronicle* 7 Jan). "It was an error of enormous proportion. Without this we have no defense."

Meanwhile, the California School Board has launched a parallel, separate court battle to strip the Superintendent's office of most of its powers to set or administer its budget and hence, education policy. They also ask for the right of preapproval of all memoranda, documents and bulletins sent out by the Superintendent.

More news on this in our next issue . . .





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