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Cal District Continues Creationist Activity

Eugenie C. Scott

Vista, CA, antievolutionism made national headlines this summer. As reported in *NCSE Reports* 13(1):1, Vista's majority creationist school board claimed in January, 1993, that they had no interest in introducing "scientific" creationism into the curriculum. However, within two months, John Tyndall, an employee of the Institute for Creation Research, had requested that the textbook evaluation committee approve for classroom use the creationist book, *Of Pandas and People* (for a review of *Pandas*, see *NCSE Reports*, 10(1):16-18).

In a devastating critique, teachers rejected the book on all accounts. Of interest is the fact that the teachers largely ignored the religious and philosophical problems raised by the book: it was rejected primarily because it represented bad science and bad pedagogy. (Copies of their evaluation are available from NCSE for \$.50 and SASE.) Excerpts:

book is not in alignment with the State Framework because it does not offer data based on testability, objectivity, and consistency as called for in the Framework. The book's premise concerning intelligent design is not put forth within a logical construct of facts and hypotheses.

Does the book provide accurate, reliable, scientific information? Carefully selected scientific information is refuted using philosophical rather than scientific arguments.

(Is the learning experiential? How does it relate to real life issues?) No. This text is purely discussion. It does not involve the learner in activity-based experiences. Even the teacher's guide is a standard testing device that does not challenge the student with higher-order, open-ended questions.

Should this book be used as a supplemental resource? Students' knowledge and understanding of science would not be strengthened by the use of
Vista, cont'd on p. 22



Catch you on p. 3...

Is the book in alignment with the State Framework? *The*

Editor's Desk

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Cover: Glen Rose, Texas, life-size *Tyranosaurus rex* model donated by Harry Sinclair and Sinclair Oil to Dinosaur State Park.

P.5 art from *C/E* VI cover, 1981, c Andrea J Lahrs

A recent caller amazed me with her question, "Which side are you on?" After we spoke for a while, I learned that I sometimes seem to take for granted that readers know where we stand—and include some material not overtly explained (a terse obit for a creationist leader, for example, which did not denounce his viewpoint clearly). She had subscribed on the basis of a mass mail letter because she opposed creationism in the schools and was not particularly interested in our publications and had not really read them. Yet her first look at the *Spring Reports* worried her and, she said, other scientists she showed it to—were we actually creationists? [Answer: No.]

A lot of support comes from people who "just" support our objectives. But her questions should remind more active members and authors and debaters NOT to assume audiences know where you stand.

My caller also asked why we don't always publish affiliations and credentials of contributors. We don't restrict our pages to people with impressive-looking titles, and we don't publish *home* addresses. The author of anonymous items in *Reports* is usually your editor. Typically, I summarize clippings and info submitted by readers, like any news editor, and I try to acknowledge sources or attribute authorship to others when appropriate.

For the record, Eugenie Scott, NCSE Executive Director and Publish-

er, has a Ph.D. in Anthropology from the University of Missouri, specializing in physical anthropology, and she has extensive teaching and research experience in her field. I also have a Ph.D. in anthropology (Columbia U). Board members are a cross-section of people interested in good science education. Past-President Schaedewald is a freelance science writer; President Friedman is a long-time public school biology teacher now teaching at Nassau Community College after teaching at the Bronx High School of Science and Hofstra University; Godfrey, a primatologist and Harvard Ph.D., is Professor of Anthropology at UMass-Amherst; Hastings is a Texas high school science teacher with a physics Ph.D.; Dr. Padian is a Berkeley Professor of Paleontology and dinosaur expert; Dr. Lazen is a biologist and an official at the National Academy of Sciences; Cohen has liberal arts education and development training; West is a museum consultant and Ph.D.

Arguments should not be won by comparing credentials, but NCSE officers *do* have 'em. And members can use NCSE to find experts when a creationism battle erupts in their neighborhood—we offer an extensive network of people throughout the US and Canada via the Committees of Correspondence. CCs incorporate people who respond to crises, and when things are quiet they tend to fade away, and when crises erupt they are a grassroots network which reactivates as needed.

John Cole

Jurassic Park

Kevin Padian

Jurassic Park is a triumph, from a paleontologist's point of view. My first reaction was, no way these things aren't real. If you're about six years old, of course, you'll ask some tough questions. (The average six-year old has a whole brain lobe devoted to dinosaurs, and fills it with the wisdom of countless dino books and documentaries, most by people who don't know the first thing about paleontology, unfortunately.)

Nobody uncovers a dinosaur skeleton as fast as the crew in the movie because we don't excavate plastic models covered with loose sand. The remote image sensor at the dig calls up on the screen a buried dinosaur skeleton, which is possible but just horribly expensive right now. (Note to potential donors: anyone who'd like to invest about five figures in some high tech dino research, give me a call—I'll show you some even cooler stuff you can buy us!)

Throughout the movie, the dinosaur we call *Deinonychus* is called the name of its smaller Asian cousin, *Velociraptor* (it's sexier). Name aside, how accurate is the movie? As with all the dinos portrayed, my best answer is "cutting edge." Everything was carefully researched, and most of the worthwhile new ideas were incorporated. Where things stray, the reason was mostly cinematic. For example, *Velociraptor* is really about the size of a large dog, and its Montana cousin was about human-sized. But the movie actually anticipated science, because as it was being filmed scientists discovered an even larger critter, *Utahraptor*, which dwarfs the movie raptors. Yes, sometimes

a specific bone is misidentified, or a dino's chewing action is wrong. But what of the *interesting* things—high intelligence, hunting in packs, incredible agility? Believe it.

T. rex is clearly the best new actor since Bart Simpson. But one thing I don't get. The script says he can't see you if you stand still, but this tactic doesn't fake out the *Velociraptors*. Dinosaurs like all reptiles (including birds) had lousy senses of smell (or so say the olfactory lobes in their brains) but excellent sight. Some probably had color sight and thus could have been brightly colored, like birds. Dogs and other mammalian carnivores are color-blind and spot prey by movement (this is why dogs appear to stare blankly across fields, except my dog who stares blankly all the time). Any carnivore is also a scavenger, and lacking a good sense of smell, *T. rex* would have needed good eyesight (like a vulture) to recognize dead or live prey and not starve.

Dilophosaurus, the chirpy little spitter, was a particular delight (and, with *Brachiosaurus* the only Jurassic dinos in the movie—the rest were from the following period, the Cretaceous). There's only one *Dilophosaurus* specimen in the world, and we have it at Berkeley; it was excavated in the 1940s by Dr. Sam Welles. It's about three times as large as the critter in the movie, though, and although one scientist suggested a gap in the tooth-bearing bones might have held a venom canal, it turns out to be just a gap. We don't have any evidence for a flaring collar, but that's easily explained cinematically by the fact that park scientists added in DNA from other species to fill gaps—in this case, today's frilled lizard.

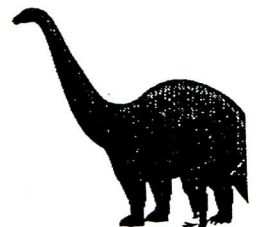
Despite the reaction from some people that the movie misrepresents genetic engineering—we really can't clone dinosaurs, but they should remember this is science fiction!—most people will probably learn more about DNA and genetic engineering from the "Mr. DNA" cartoon sequence than from all the world's molecular biologists put together. It's a shame we can't have graphics this good in every classroom. The movie shows the interdisciplinary focus of science all but lost in textbooks. Today's paleontologist has to know geology, fossils, genetics, molecular biology, computers, and a dozen other fields—or work with people who do—to be on the cutting edge.

Tons of newsprint have been spent on the question of the bioengineering ethics in *Jurassic Park*. Remember, though, that as in *King Kong*, which this movie resembles in more than one way, it was the impresario, the financial entrepreneur, who undertook the project in the first place. The movie is a great argument for the need that every citizen understand enough basic and current science to make intelligent decisions and participate in the process of scientific discovery and development, in the marketplace as well as in the voting booth.

We paleontologists are on our way to the field to find out more while we wait for the sequel—"Cretaceous Park?" ♦

Abridged from a much longer review—Ed.

Kevin Padian is Curator, Museum of Paleontology, University of California-Berkeley and an NCSE Board Member.



CBS TV's Noah's

Robert Schadewald

Time Magazine exposed CBS Television's February "Noah's Ark" pseudodocumentary as a hoax in July 1993, with some help from NCSE (see *NCSE Reports* 12(4):22). Leon Jaroff, long-time Time Life science editor, investigated the CBS claims and found they were based on fraud and deception.

Despite a narrator's claim that it was "not a religious mission but an archaeological quest," the program was straight creationist propaganda. It was heavily laden with familiar creationist "experts," such as Henry Morris, John Morris, Walter Brown, and Carl Baugh. A few token skeptics appeared ever so briefly, but their comments seemed ineffectual and were quickly buried by Arkeologists. (But: The entire program—including skeptics' comments—apparently was scripted by creationist Dave Balsiger!) One skeptic, Rabbi Sherwin Wine, was filmed with his face carefully lighted from below, giving him a remarkable resemblance to popular depictions of Satan. You get the idea.

Many NCSE members wrote to CBS to complain, usually citing specific falsehoods and/or misrepresentations; some sent copies to local CBS affiliates and local newspapers. Some wrote several times. Only two that we know of (Jukes and Padian) received any reply from CBS, and those replies were evasive and nonsensical. A few local newspaper letters columns carried these complaints. CBS simply ignored critics and did not even send a perfunctory "thank you

for your comments" which goes out to most letter-writers.

Not surprisingly, the creationist reaction to the broadcast was more favorable. John Morris of the Institute for Creation Research reviewed it in the April 1993 *Acts & Facts*. Although he noted that "many of the facts were somewhat overstated," the only real error he found was a misidentified photograph. The *Bible-Science News* was more enthusiastic, as was the *Christian News*.

The show prominently featured George Jammal, presented as an Ark eyewitness. Jammal claimed that he and a companion, Vladimir, had climbed Ararat in 1984 and discovered the Ark. The old boat was well preserved. Jammal and Vladimir crawled inside and saw animal cages. Naturally, they took numerous photographs to document their find. Unfortunately, when Vladimir was backing up to get a good picture of Jammal with the Ark in the background, he fell over a cliff, camera and all! So all Jammal had to show for his adventure was a small piece of wood from the Ark.

George Jammal's story was utterly preposterous, and I recall thinking that he was an obvious fraud. On the other hand, his story was not significantly more preposterous than that of the usual Ark eyewitness. Whatever they may have thought privately, the Sun/CBS crew found Jammal's story good enough for their purposes.

In fact, Jammal was perpetrating a hoax, but not for the reasons I thought. A part-time actor, Jammal had been telling a version of this story for years before the Sun/CBS

team got wind of it. Enter Gerald Larue, Emeritus Professor of Biblical History and Archaeology at the University of Southern California and a founder of the Committee for the Scientific Examination of Religion (CSER). Larue, who had known Jammal for years, had been finagled into appearing on a previous Sun/CBS Bible show and was upset about the dishonest way his statements had been edited. When Jammal told him that Sun/CBS had contacted him about his Ark story, Larue encouraged Jammal to do it. He also coached Jammal on how to present his story, although Jammal now denies having lied. Neither Larue nor Jammal had ever been on Mount Ararat, but no matter. The result suited Sun/CBS's purpose.

When perpetrating such a hoax, fair play requires that the victim be provided with an out. For this purpose, Jammal literally cooked up a piece of Ark—he baked a piece of pine in his oven to make it look old! Sun/CBS could easily have had Jammal's wood carbon-dated, had they so wished. Needless to say, they did not.

Actually, the sting nearly backfired. Soon after CBS aired the program, Larue and the Committee for the Scientific Examination of Religion issued a press release criticizing the program as pseudoscientific and dishonest and exposing the Jammal hoax. It fell flat! The story made a few smaller newspapers and journalism reviews, but mostly it was massively ignored.

One religious paper picked up part of it. The *Christian News*, a conservative Lutheran tabloid, ran a story in its 29 March 1993

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"I think the
CBS
network
is
shameless."
❖

Ark Hoax Exposed

issue entitled "CBS Program on Noah's Ark Labeled 'Irresponsible.'" The article, attributed to the Religious News Service, was entirely based on CSER's longer press release. Although the Jammal hoax figured prominently in the CSER press release, it is not mentioned in the RNS/*Christian News* story. Neither are the other substantive criticisms. Someone at *Christian News* (or RNS) thought it best to conceal Jammal's Noah's Ark hoax from the believers. Ironically, the *Christian News* is notorious for proclaiming the Holocaust a Jewish hoax!

The Jammal story received broader exposure in archaeologist Richard A. Fox's article "'The Incredible Discovery of Noah's Ark'; An Archaeological Quest?" appearing in the Summer 1993 *Free Inquiry*. While Fox's article was in press, NCSE supporter Leon Jaroff, long-time science-editor at *Time* and first editor of *Discover* magazine, got wind of the story from NCSE. We sent him the CBS videotape and discussed the problem with him at some length.

Jaroff exposed the hoax to a wider audience in "Phony Arkology," a full-page exposé in the 5 July 1993 *Time*. While CBS claimed they had innocently purchased the program from Sun International Films, Jaroff left no doubt that CBS was ultimately responsible for deceiving the public, whether through negligence or complicity. The Associated Press did an immediate follow-up story.

At last CBS couldn't ignore its responsibility, right?

CBS's Beth Comstock told the AP that the program "was an entertainment special, not a news documentary. We certainly were not aware of any alleged hoax." Silence fell for a week, until Howard Rosenberg of the *Los Angeles Times* did a widely syndicated follow-up story. CBS spokeswoman Susan Tick told Rosenberg that they were "investigating and trying to get substantiation from the producer."

Recently, I called Jaroff and asked whether *Time* had received a more satisfactory response from CBS. Nope. CBS apparently has no standards of integrity for programs from their entertainment division. They hold viewers responsible for distinguishing "entertainment" like the Ark show from documentaries produced by their news division. [The News Division did not respond to NCSE queries about the show.]

Jaroff doesn't buy this. "I think the CBS network is shameful," he says, "and they have behaved shamelessly throughout our investigation. They don't care. They are unethical. They are beyond embarrassment."

Sadly, Jammal's absurd story about finding Noah's Ark may not have fooled either Sun International Films or CBS. Perhaps they only found it *useful*. Consider that long after detailed scientific critiques and protest scriptwriter Balsiger and CBS struck again on Saturday 15 May 1993 with another Balsiger-written documentary, "Ancient Secrets of the Bible." If possible, it was worse than the Noah's Ark show. I called CBS soon afterward, and the gentleman I spoke to chuckled when I told him

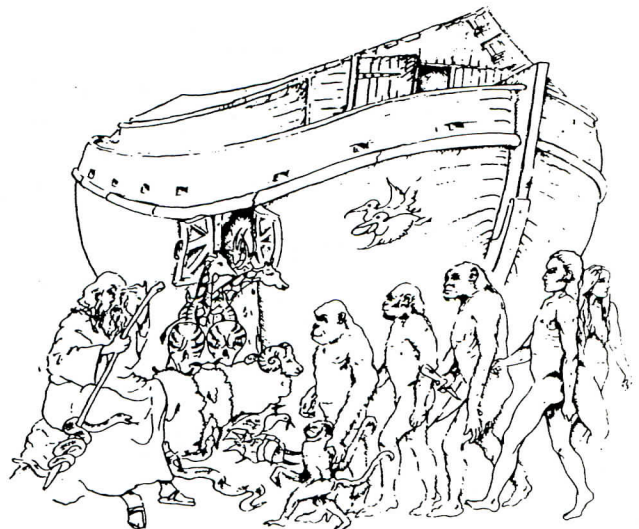
the program was disgraceful. He said that the feedback they received was overwhelmingly favorable.

These programs reportedly got high ratings for their hour, so CBS can chuckle all the way to the bank. Intellectual integrity apparently has a place in the great wasteland only when good for the bottom line. CBS now claims no further Sun coproductions are planned (at least one more had been announced), but why not? Wouldn't more fraud be good for the stockholders?

NBC, caught faking a fiery pickup truck crash, soon found itself eyeball-to-eyeball with General Motors lawyers packing double-barrelled briefcases. Seized with a sudden passion for journalistic integrity, NBC publicly retracted the crash story, apologized, and went through some cleansing motions. But simple truth, unlike General Motors, has no lawyers. CBS apparently adjusts its integrity accordingly.

Robert Schadowald is NCSE Past-President.

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CBS can
chuckle all
the way to
the bank.
❖



In the Trenches . . .

Eugenie C. Scott

Those of us who do not teach at the K-12 level may be surprised at the amount of official antievolutionism that is found there, especially among administrators. From time to time we will run excerpts from the "war zone" to give a flavor of what many teachers are experiencing.

A high school science teacher from Oklahoma sent us the following in June:

In March we were told (as always) to review the course description for the courses to be printed when the students picked their next year's schedule. The other Biology teacher showed me what he has put in for X number of years and asked if I had any problem with the description. I had none whatsoever.

About two weeks later the course description came back to me with EVOLUTION circled and a hand-written note from the superintendent asking if we couldn't come up with a better word. I wrote, "I'm sorry—evolution is what I teach and there is no better word" and signed my name. I then took it to the other Biology teacher, and bless his heart!—he signed his name right under mine.

Three days later we were in the principal's office being told, "Yes, there is a better word and you'd better come up with it." He told us to go right on teaching just like we always had, but the course description would not say "evolution." The other biology

teacher pointed out that it had said "evolution" for at least 5 years and maybe 11 (how long he has been there) and no one had ever complained. Tough!! We have a big bond issue coming up, the state board of education is under fire across the state, and evolution will not be in our course description. Mr. _____, having more sense than I do, picked "natural selection," which is what it now says in the Biology I course description.

A teacher from Missouri wrote us during the same month:

I am a high school teacher of social studies and language arts but because I have a degree in anthropology, I all too often am a target for the "Do you believe in evolution?" question. This I can handle, but now Gish's book(s) are appearing in the hands of high school students and while I can point out lapses in reasoning, etc., there are many areas of science of which I am ignorant.

Further, each year our local Bible college holds its two day creation science/bash evolutionists symposium. One of our middle school PTOs helped finance a social studies teacher to attend a creation science workshop in St. Louis and he taught creationism for the prehistoric man unit in his class! A junior high school science teacher informs his class he does not "believe" in evolution prior to teaching it! A local preacher has lodged complaints naming me a liberal and secular humanist, which I gather translates roughly as "atheistic anti-christ." HELP!

At a teacher's conference, a California teacher described to me problems he had teaching evolution in his district. A group of parents met with him to complain, and he explained that evolution was part of the state curriculum and it was important that he teach it. One of the parents burst out in frustration, "But you don't have to teach it like you believe it!"

NCSE responded to all these requests for help and many others.

But it's a David vs. Goliath battle, we're David, and we need help making slingshots and paying for their distribution. ❖

Creation/Evolution Highlights of Back Issues

Issue 9

- Dilemma of the horned dinosaurs
- Old time religion and the new physics
- Six "Flood" arguments creationists can't answer

Issue 10

- True vestigial structures in whales and dolphins
- Whales and evolution
- The turtle: A creationist shell game?

Issue 11

- The impossible voyage of Noah's Ark (special issue)

Issue 15

- Paluxy River footprints (special issue)

News

NYC School Board Elections: Did Creationists Gain?

Jack Friedman

On May 4th, New York City held school board elections. National publicity was generated by the spectacle of America's supposedly most liberal city facing political challenges from the Christian Coalition and other religious right organizations. They fielded 90 candidates for the 285 local school board positions, and at press-time (end of June), 283 had been decided.

Of the 90 Christian Coalition-backed candidates, 50 were elected. Ralph Reed, Christian Coalition executive director said from his Virginia headquarters that the results were "a tremendous victory," and he indicated that his group is planning for future elections.

People for the American Way expressed pleasure that 40 of the 90 candidates were defeated and that many people had been elected to school boards sharing *their* views. A number of openly gay candidates won, for example, as did a number of people endorsing sex education, overcoming tremendous Coalition campaigning against them. In addition to conservative Protestant churches, the NY Catholic Archdiocese and some synagogues openly distributed the Christian Coalition pamphlet evaluating candidates' positions and practices on the sex issues. Certainly, the religious right did not take over the school boards.

Typically, the strategy of antievolutionists has been to win control of school boards quietly or incremen-

tally, year by year, winning a good percentage in each election until it looks like a "sudden" take-over. We won't see radical changes this year (although the respected liberal Chancellor of Education had been forced out, already, before this election).

The NYC campaign focussed on sex education, birth control and alleged endorsement of homosexuality (the School Chancellor's campaign for "tolerance" was caricatured as *advocacy* of homosexuality). The Christian Coalition scored a political "first" in NYC by gaining the support of the powerful

and conservative Roman Catholic Cardinal Connor and a number of orthodox Jewish groups for its candidates. The Coalition thus campaigned on the strength of religious conservatism involving the issue of s-e-x, not e-v-o-l-u-t-i-o-n, which might have made them a laughing-stock in New York. However, it is probably safe to say that the Coalition did not suspend its judgement that teaching evolution is literally the root of all evil, so we have probably just seen the election of a good number of antievolutionists to NYC school boards. "Stealth candidates" have been their trademark (see *Reports* 12(3):1). ♦

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♦

Kentucky Law Tries To Evade Church/State Separation

John Cole

In the guise of opposing censorship, the Kentucky legislature approved a noble-sounding 1992 law to ensure that teachers are free to post on their walls "any excerpts or portions of the National Motto, The National Anthem, the Pledge of Allegiance, the Preamble to the Kentucky Constitution, the Declaration of Independence, the Mayflower Compact, the writings, speeches, documents, and proclamations of the founding fathers and presidents of the United States, U.S. Supreme Court decisions, and acts of the U.S. Congress, including the published text of the Congressional Record. There shall be no content-based censorship of American history or heritage in the Commonwealth based on religious references in

these writings, documents or records" (emphasis added).

Translation: posting prayers, creationist dogma, etc. is ok as long as it involves quoting a VIP. Since the *Congressional Record* prints anything a Congressman mails in, the Institute for Creation Research and Duane Gish may soon emerge among the Founding Fathers. The ICR is urging that every state enact similar legislation.

Few could object to a freedom to post news articles, but a Constitutional issue arises in this situation where it is clear that the legislative intent was to promote religion by setting up a sort of anti-censorship smokescreen. Also, a bias towards religious, anti-evolutionist, etc. material would be a misuse of any freedom to post things. ♦

California School Super Nixed by Legislature

John Cole

When California Superintendent of Public Instruction Bill Honig was forced from office (see *Reports* 12(4) and 13(1), Governor Pete Wilson nominated a Republican state senator, Marian Bergeson, to succeed him. Bergeson was widely opposed by educators because of her track record in the legislature which they viewed as bad for public schools.

In addition, Senator Bergeson's testimony at Senate confirmation hearings raised eyebrows when she said that she believed the Earth is about 300,000 years old and that evolution should be taught "as a theory." Honig had dramatically increased California's commitment to science education and evolution education in particular, drawing the wrath of the Religious Right in the process.

Widespread political opposition and acrimonious debate led to Bergeson's nomination being vetoed by the California state senate. At press time Governor Wilson had not named a successor. An election for a full 5-year term will be held in 1994.

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Teaching
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as teaching
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heliocentrism."
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What's Behind the Vista and Louisville Strategies

Eugenie C. Scott

Both the Vista school board resolution and the Louisville curriculum guide reflect a loophole creationists find in the 1987 Supreme Court decision, *Edwards v Aguillard*, which noted that teachers had the flexibility "to supplant the present science curriculum with the presentation of theories, besides evolution, about the origin of life." Creationists in Alabama, Texas, California, Ohio, and elsewhere have interpreted justice Brennan's words as a green light to teach "alternate theories to evolution," "challenges to evolution," and even "arguments *against* evolution" —which of course are euphemisms for creation "science" (See *NCSE Reports* 9(2):14-15).

Needless to say, from a scientific point of view, teaching as in Vista, "scientific evidence that challenges" evolution makes as much sense as teaching "scientific evidence that challenges heliocentrism." The same problem exists with the Louisville curriculum guide, which directs teachers to

teach "alternate theories to evolution." There aren't any, if "theory" is taken in its scientific definition rather than its lay definition of a guess or a hunch.

That evolution took place is firmly established. How it took place, by what mechanisms, which creatures are ancestral to which—these ideas are in dispute, but what the Vista and Louisville board members seek is not to present legitimate disagreements of this sort, but to question whether evolution occurred or not.

One might believe that such regulations are innocuous because they are empty of meaning, but the problem extends beyond the exact wording of such regulations or requirements. We have found in many districts that merely making evolution a "controversial issue"—as such regulations do—means that many teachers will cease teaching evolution at all. Because the goal of the creationism movement is actually to get evolution out of the curriculum, good science loses in such cases—whether or not creationism is ever taught. ❖

Newsletter and Journal Index on Computer

Member Christopher Stassen has compiled a computer "Scan" Index to *Creation/Evolution* and *NCSE Reports*. From issues 1 to 31 for the journal, and 1-13(1) of the newsletter, an IBM-compatible computer can search according to author, topic, and keywords. Looking for a critique of Flood Geology? You can easily "scan" the journal or

the newsletter to see what has been published. We use it in the NCSE office all the time. This is **not** the same as the recently-published journal index prepared by Ken Saladin, which is not yet available on diskette. The Stassen diskette is **available for \$5 through NCSE: See "Diskettes" order information in Centerfold.** ❖

News

Gould To Debate Creationist—NOT

John Cole

Kent Hovind, a heretofore obscure Pensacola, FL evangelist, has made news in the Midwest with the announcement that he would soon be debating Harvard University's Stephen Jay Gould. "I suspect that Gould will back out," Hovind said. "He is probably 10 times smarter than I am, but I assure you I will slaughter him in a debate" (*Peoria Journal Star* 6/25/93).

Long an opponent of creationist-debating, NCSE Supporter Gould has turned down scores of challenges to debate creationists, so we suspected something was wrong here. Hovind's vision of Gould sitting in his office at Harvard, getting cold feet at the prospect of coming up against Kent Hovind was a bit hard to believe, so executive director Eugenie Scott asked Gould about the matter.

"This just goes to show you really shouldn't believe everything you read," Gould writes. "I have never heard of the man and therefore cannot have agreed to anything with him." He further muses that Hovind could be using the "obviously phony tactic of claiming that he challenged me to a debate when he didn't and then claiming that I backed out when I didn't appear."

The planned debate is a complete fabrication, in other words. Readers should spell this out via letters to local newspapers if they hear this claim from Hovind. NCSE has heard from two people (Karen Bartelt and Ranse Trax-

ler) who already have challenged this bogus debate claim. Scott is interested in tracking any further examples of this fabrication—let her know if you see or hear Hovind claims about this nonexistent debate arrangement. The point is not to beat a dead horse but rather to make clear a common, if reprehensible tactic.

Hovind, by the way, has for several years offered a \$10,000 reward to anyone who can offer empirical evidence that evolution has taken place. (He is upset about the film *Jurassic Park*, since there never was a Jurassic.) Unsurprisingly, no entrants seem to win the prize. ♦

Another Creationism Trial Brewing?

Eugenie C. Scott

In 1986, Louisville, OH had a curriculum guide requiring teachers to "contrast, compare and discuss alternatives to the evolutionary theory, particularly creationism." After the 1987 Supreme Court decision, *Edwards v Aguillard*, such wording became plainly illegal (see, p. 8). In the early 1990's, the Board wrestled with how to word the curriculum guide to respond to community pressure to teach creationism but still stay within the law. The Board's legal firm advised it that because of the *Edwards* decision, they could not require the teaching of creationism, but *could* teach "alternative theories to evolution" (*Canton Repository*, 9/30/92, B-4).

In September 1991, the Board adopted a curriculum guide that stated in various places that teachers should "contrast, compare and discuss alternatives to evolutionary theory" in junior high, and in high school biology, "Develop an appreciation of theories on evolution and it's (*sic*) alternatives," and the familiar, "contrast, compare and discuss alternatives to evolutionary theory." The goal here, of course, is

to teach "scientific" creationism; as stated by Andy Aljancic, a pro-creationism citizen who frequently addresses the school board meetings, "creation, as far as I'm concerned, is the only alternative" (*Canton Repository*, 9/10/91). By eliminating the "c-word," Board members seek to avoid legal entanglement.

In the fall of 1992, the Ohio ACLU requested that Louisville drop the "alternatives to evolutionary theory" wording in the curriculum guide. The district subsequently voted 3-2 to retain the wording. Local activist Andy Aljancic assured the district that the Ohio Rutherford Institute, a legal organization supporting religious right causes, would defend the district *pro bono* (ie, free) if a lawsuit were filed. By June, 1993, the ACLU had not yet filed. ♦

♦
"creation,
as far as
I'm
concerned,
is the only
alternative"
♦

Computer Bulletin Board

To call the NCSE-FREENET computer bulletin board use the number (216) 368-3888.

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Tracking Those

Cold Comfort for Creationists in Ruse Talk

Eugenie C. Scott

Michael Ruse's off the cuff remarks at NCSE's American Association for the Advancement of Science symposium have been transcribed and are being circulated among creationists. Given how creationists have exploited some off-the-cuff comments of evolutionists (see *NCSE Reports*, 12(4):14), we can expect to find this transcript and out-of-context quotations from it showing up around the country (see accompanying story).

It is already showing up on the creationist lecture circuit. In the last issue of *NCSE Reports* (13(1):20), Art Shapiro reports that lawyer Phillip Johnson, author of the anti-evolution book *Darwin on Trial* (reviewed in *Creation/Evolution*, 31:47) claimed that Ruse's current position, based on the transcript, is that Darwinism is not really a scientific inference, but rather a philosophical preference. This should come as a shock to individuals who know Ruse's books (*But is it Science? The Evolution-Creationism Controversy*; *Darwin Defended*, etc.) and who recall that his views prevailed in the judge's conclusion in the 1982 *McLean v Arkansas* trial that "scientific" creationism did not qualify as science.

What, exactly did Ruse say? Has he "lost the faith?" Can it be that this internationally-known Darwinian scholar no longer distinguishes between religion and science?

Be aware that Ruse did not speak from prepared notes, or any notes at all. The brief comments were

spontaneous; the transcript reflects this. He rambled, digressed, and left points dangling, but a careful reading of the transcript (copies available through NCSE—see "Resources" section) will demonstrate that by no means is Johnson reflecting Ruse's views. There is no backsliding from his conviction that creationism is not science and evolution is:

I don't come here preaching creationism or preaching, you know, some message of negativism: folks give up, modern philosophy of science is now showing that science is just as much a religion as creation science, so frankly folks there's nothing that you could do, and if I could go back ten years to Arkansas I'd just reverse everything. (transcript p. 8)

There are, Ruse claims, (p. 3 of the transcript) "certain metaphysical assumptions built into doing science," and of course, this would be true of evolution too, as part of science. Obviously, there are metaphysical assumptions build into religion—but this does not make religion and science equivalent. If I am a mammal and my cat is a mammal, this does not make me a cat. What is this metaphysical assumption, unprovable, but requiring acceptance on faith? Ruse says:

It seems to me very clear that at some very basic level, evolution as a scientific theory makes a commitment to a kind of naturalism, namely, that at

some level one is going to exclude miracles and these sorts of things, come what may. Now, you might say, does this mean it's just a religious assumption, does this mean it's irrational to do something like this? I would argue very strongly that it's not. At a certain pragmatic level, the proof of the pudding is in the eating. And that if certain things do work, you keep going with this, and that you don't change in midstream, and so on and so forth. I think that one can in fact defend a scientific and naturalistic approach, even if one recognizes that this does include a metaphysical assumption to the regularity of nature, or something of this nature. (p. 5)

To assume (yes, assume; it is not provable) that nature operates in a regular fashion, governed (and here I am adding to Ruse's comments, though I do not think violating them) by principles knowable through human reason and empirical observation, perhaps makes science based on an assumption (we can argue over whether this is a "metaphysical" assumption) but it hardly makes science a religion.

When the transcript is read in full (if somewhat rambling) context, it becomes clear that Ruse is discussing a philosophical point, rather than strategies for fighting creationists. He even seemed somewhat apologetic for bringing the point up, as if he were airing some sort of dirty scientific linen which would be somehow used against us by the other

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One can in fact defend a scientific and naturalistic approach
❖

Incredible Creationists

side. Actually, about all he was doing was reminding the scholars assembled not to use an old-fashioned philosophy of science called "logical positivism," and to publicly recognize that science, like religion, has unproven assumptions.

So what's the big deal? Personally, I have in many of my public lectures pointed out that science, like all epistemologies (ways of knowing), has unproven assumptions. The audience takes in stride our unproved but entirely reasonable assumption that the universe operates in a regular fashion, according to knowable processes. This is not too startling a revelation for the general

public, and Ruse is correct to point out that to claim that religion and science have nothing in common is erroneous. But this is decidedly not the same thing as claiming that science or evolution is "just another religion."

In closing, I quote one of Ruse's final comments, in response to a question:

Let me end certainly by saying that although I got on quite well with Johnson at the personal level, I still think that his book is a slippery piece of work. And you're absolutely right that he, like any lawyer, is out to win. That's the name of the

game in law. And certainly he can get points by shifting back and forth on meanings of naturalism, or if he can get a report on what Ed Manier (a questioner from the audience—ed.) and I were doing, and then sort of take it out of context, I've no reason to think that he wouldn't do that sort of thing.

Well, Michael, the transcript is in circulation. It looks like you were right.

[Eds. note—*The Summer 1993 Origins Research* features an article by Paul Nelson on the theme of Ruse's apostasy!] ♦

Teen Poll: Kids Favor Creationism

A January 1993 George Gallup poll (Religious News Service 6/23/93) shows that younger kids are strong creationism-supporters, but that support declines in the later teen years. 45% of teens 13-15 believe every word of the Bible is literally true, a figure which drops to 31% at age 16.

52% of teens believe humans have "developed" over millions of years from "lesser forms," via a process directed by God. 10% say "human development" took millions of years with God playing no role in the process. 14% view the Bible as an ancient book of fables, legends, history and moral teachings, "recorded by man."

49% of adults in Gallup's latest survey view humans as specially created ca 10,000 years ago.

This support for creationism is not surprising, given the educational system's bias against—fear of—

teaching evolution and the political pressure it faces. Perhaps it's slightly encouraging that kids do learn a little bit, but it is not at all encouraging to realize that so few do! Whether it's weak textbooks, stifled and/or ill-informed teachers, or whatever, the understanding of evolution still reaches few students, the poll suggests.

Many creationists, of course, will applaud, but others will bemoan the nonliteralist, theistic tendencies revealed. However, it's also worth noting that the Gallup polling organization has long been biased towards theism, if not direct scientific creationism; Gallup has worded polls for many years in ways which yield at least mildly biased results on this score. Notice the emphasis on odd terms like "human development," which biologists use to refer to embryology and growth, instead of "evolution!" (This euphemism for evolution prob-

ably increased the number by incorporating theistic evolutionists.)

505 teenagers were polled by telephone; the margin of error reported was +/- 4%. ♦

Overview of C/E Arguments

G. Richard Wakefield, NCSE's Ontario Liaison has produced a 61 page, profusely illustrated and referenced document explaining evolutionary biology with specific reference to creationist arguments and errors. "Biological Evolution: An Overview of Mechanisms and Evidence," an OASIS monograph, is a must-have for teachers, debaters, and anyone else who has to answer creationist claims. \$18.00 Canadian, \$15.00 US (Canadian members can write directly to P.O. Box 617, Beaverton, ON, L0K 1A). Available in the US through NCSE. See centerfold form. ♦

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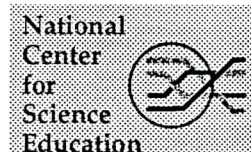
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Humorous (to put it mildly) look at creation/evolution controversy. Not for the easily offended!

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Still the best treatment of the creationist movement in social and political context.

New Audio Cassettes Available!

NCSE's 1993 AAAS symposium is now available on audiotape! Talks by Eugene C. Scott, Michael Ruse, Jon Marks & Laurie Godfrey, William Thwaites, Ken Miller, and Howard Van Till. Set of 3 tapes: \$15.00.

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Send one SASE for up to 5 titles; multiple copies are 25c each from NCSE (+ SASE).

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Bumpersticker #2

NCSE News

Classic Creationist Reprints

John Cole

NCSE past-president Bob Schadewald is probably the world's leading expert on the Flat Earth Society and its history and relationship to modern creationism. And if Hollow Earth and Geocentric aspects of creationism or similar warped geography is your game, Schadewald's the name to see. Directly and indirectly, today's "scientific" creationists use arguments from the flat Earth and geocentrist cranks of the 19th and early 20th century, even though most of them deny the connection.

Schadewald has just reprinted two articles and a booklet from the heyday of exuberant antievolutionism.

Ford's *Universal Gravity* . . . is an important 20th Century creationist tract newly available to modern readers.

"The Teaching of the Word of God Regarding the Creation of the World and the Shape of the Earth; in Fifty Questions, Answered by Scripture," compiled by Apostle Anton Darms, Christian Catholic Apostolic Church in Zion" (from *Leaves of Healing*, 1930) is a 20-pp. pamphlet copyright 1993, Paradox Publishing, 13204 Parkwood Drive, Burnsville, MN 55337; "Which Will You Accept? The Bible, the Inspired Word of God, or The Infidel Theories of Modern Astronomy," by Wilbur Glenn Voliva, Christian Catholic Apostolic Church in Zion (a 16-pp. pamphlet from the same source). These are available for 3.95 each or \$6 for both from the publisher (Paradox), postage paid.

These basic arguments are still alive in "scientific" creationism, and there are even serious believers in geocentrism and flat Earth ideas extant. These historic documents illustrate the age (and creakiness) of a lot of modern creation "science." ♦

Ooops! Price Corrections

To paraphrase a bumper-sticker, "typos happen," but some are doozies. Some are too minor to merit corrections, but in the recent Creation/Evolution Index some very erroneous details about publication prices appeared which should be corrected.

The current member price for *Voices and Reviews* is \$8, not \$6. The *Index* is \$10 (\$1 shipping).

Back issues of *C/E* are \$6@, 10 or more \$5@; shipping is \$1 for the first issue, .75 for each additional up to \$10 max.; a complete set of back issues (No. 1-30) costs \$100 + shipping of \$10.

Back issues of *NCSE Reports* and *NCSE Newsletter* (Vols. 1-12) are \$3 per issue, \$18 per volume; shipping is the same as above. Complete sets are \$175 + \$10 shipping; NCSE will invoice foreign shipping.

Creationist Books Reviewed

Liz Hughes has edited *Reviews of Creationist Books*, a 155-page book with 44 book reviews by people such as Stephen Jay Gould, G. Brent Dalrymple, Kevin Padian, Michael Ruse, Gerald Scoog, Karl Fezer, Ronnie Hastings, Frank Lovell, Francis Graham, and others. Hughes updated an earlier NCSE publication, *Reviews of 32 Creationist Books* with revised and updated reviews of older books still being marketed, new reviews of newer books, and omission of some material no longer used by creationists.

The paperback book (ISBN 0-939-873-52-4) is intended for school committees, creation-watchers, librarians, and others concerned with creationist books and textbooks. It's available to NCSE members for \$8.00—a 20% discount (see centerfold for ordering information), and please inquire about bulk rates.

Nelkin elected to NIH

NCSE Supporter Dorothy Nelkin was elected in Spring 1993 to the the National Institute of Medicine. The NYU sociologist of science was one of fifty people elected this year.

Congratulations!

NCSE News

NCSE Donors

A warm thank you to all of the individuals, organizations and firms that donated to NCSE throughout 1992, and special thanks to the following people who donated \$100 or more for their very needed support. Those in the Patron's Circle donated \$1000 or more—a level of support we appreciate and need to expand. (* notes an NCSE Board Member or Supporter).

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The Early Argument for Church/State Separation in America

James Madison (1751–1836)
“Father of the Constitution”
and two-term President of the
United States

It is of great importance in a republic not only to guard the society against the oppression of its rulers, but to guard one part of the society against the injustice of the other part. Different interests necessarily exist in different classes of citizens. If a majority be united by a common interest, the rights of the minority will be

insecure. . . in a free government the security for civil rights must be the same as that for religious rights. It consists in the one case in the multiplicity of interests, and in the other in the multiplicity of sects. The degree of security in both cases will depend on the number of interests and sects; and this may be presumed to depend upon the extent of country and number of people comprehended under the same government. . . In a society under the forms of which the stronger

faction can readily unite and oppress the weaker, anarchy may as truly be said to reign as in a state of nature, where the weaker individual is not secured against the violence of the stronger. . . .

The Federalist, Paper No. 51

(Part of the 1788 argument against Governor Clinton . . . of New York . . . who opposed the new Constitution) ♦

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")

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Altangerel, P., M.A. Norell, L.M. Chiappe, and J. M. Clark. 1993. Flightless Bird from the Cretaceous of Mongolia. *Nature* 362: 623-626, April).

Arsuaga, J-L., I. Martinez, A. Garcia, J-M Carretero, and R. Carbonell. 1993. Three Human Skulls from the Sima de los Huesos Middle Pleistocene Site i Sierra de Atapuerca, Spain. *Nature* 362:534-537. New discoveries re: Neandertal and modern Homo relationship.

Augert, E.R., K.D. Clements and N.R. Pace. 1003. The Largest Bacterium. *Nature* 362: 239-241. A prokaryote symbiont living in the gut of the surgeonfish is 600 micrometers long.

Ayala, Francisco J., and B. Black. 1993. Science and the Courts. *American Scientist* 81(3): 230-239 (May-June). Clear, polemical explanation of how science works and how courts should use "expert witnesses."

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Mims
actually
never was
hired and
then
unhired.

Bergman, Jerry. 1993. Censorship in Secular Science: the Mims Case. *Perspectives on Science and Christian Faith* 45(1):37-45. Supposedly hired as a columnist and then "unhired" when he revealed that he did not accept evolution. A creationist's view of the Forrest Mims-Scientific American argument. Available from NCSE for \$1.25 + SASE.

Bunney, S. 1992. The Amphibious Past of Whales. *New Scientist*

137(1865): 17, 20 March. Report on an apparently classic "intermediate" form.

Chown, M. 1993. All You Ever Wanted to Hear about the Big Bang. *New Scientist* 138(1869): 32-33. Not overly accurate, reviewer says.

Flam, Faye. 1993. Plugging a Cosmic Information Leak. *Science* 259:1824-1825, 26 March. Can black holes deplete the Universe of information by sucking it in and then evaporating? News report.

Fort, D.C. 1993. Science Shy, Science Savvy, Science Smart. *Phi Delta Kappan* 74(9): 674-682 (May). Discusses science illiteracy.

Greenwood, J.J.D. 1993. Theory Fits the Bill in the Galapagos Islands. *Nature* 362: 699 (22 April). Finch species and environmental pressures; new study.

Harker, Kent. 1993. Dr. Zark. *BASIS* 12(4): 1-3, 4. Critique of CBS "Noah's Ark" broadcast. SASE+\$0.75.

Herbert, Sandra. 1993. Essay Review of a number of recent Darwin biographies (Desmond & Moore, Mayr, etc.). *Isis* 84(1):113-124.

Hively, W. 1993. Life Beyond Boiling. *Discover* 14(5):86-91, May. Microbes that exist in temperatures above the boiling point of water.

Jensen, James A., and Kevin Padian. 1989. Small Pterosaurs and Dinosaurs from the Uncompahgre Fauna (Brushy Basin Member, Morrison Formation: ?Tithonian), Late Jurassic, Western Colorado. *Journal of Paleontology* 63(3): 364-373. Important

technical paper on bird/dinosaur relationship.

Kohl, Herbert. 1993. Over the Rainbow. *The Nation* 256 (18):631-636 (10 May). Reviews of recent books on education and some analysis of the cases of Bill Honig in California and Joseph Fernandez in NYC—both driven out by religious conservatives.

Lederman, Leon, with Dick Teresi. 1993. *The God Particle: If the Universe Is the Answer, What Is the Question?* NY: Houghton Mifflin, 434 pp, \$24.95. High energy physics history, jokes, etc. by ex-AAAS pres. and a prime backer of the Superconducting Supercollider; how Big Science works and why it should.

MacLean's. 1993. God Is Alive. *MacLean's*, pp. 32-37, 12 April. Survey of religious belief and practice in Canada. 53% of adults reject evolution.

Martin, R.D. 1993. Primate Origins: Plugging the Gaps. *Nature* 363: 223-234. Review article on fossil evidence and the problems of incomplete data.

McInerney, J.D., and R. Moore. 1993. Voting in Science: Raise Your Hand if You Want Humans to Have 48 Chromosomes. *The American Biology Teacher* 55(3): 132-134 (March). Discusses creationist tactic of having students vote on which of 2 positions is correct.

Mills, G.C., M. Lancaster, and W.L. Bradley. 1993. Origin of Life and Evolution in Biology Textbooks—A Critique. *American Biology Teacher* 55(2): 78-83 (Febr.). "A creationist article which produced a flurry of letters

Resources

in response in the following 2 issues."

Nature ed. 1992. Eppure si non muove. *Nature* x:xx. "The Vatican's half-hearted rehabilitation of Galileo will not prevent the recurrence of errors of the same kind."

Nelson, Paul. 1993. Transcript of Michael Ruse's comments during NCSE symposium at 1993 AAAS meeting, with addendum by Phillip E. Johnson. Available through NCSE for \$1.00 + SASE.

Perry, R.T. 1993. Using Different Examples of Natural Selection When Teaching Biology. *American Biology Teacher* 55(4): 241-244 (April).

Schopf, J.W. 1993. Microfossils of the Early Archean Apex Chert: New Evidence of the Antiquity of Life. *Science* 260: 640-646 (30 April). Did diverse cyanobacteria thrive just a billion years after the Earth's formation?

Shell, E.R. 1992. Waves of Creation. *Discover* 14(5): 54-61, May. Elizabeth Vrba's ideas about how climate influence speciation and species extinction.

Spaeth, Robert L. 1993. The Leaning Tower of Truth; Round up the Usual Subjects. *Commonweal* 26 March, pp. 6-7. "Review" of Catholic ruling on Galileo.

Toumey, Christopher P. 1993. Praying with Creationists. *Soundings* 76(1):59-84. How an anthropologist gained acceptance by his "tribe," the scientific creationists, and respected them.

Vickers-Rich, Patricia, and Thomas Hewitt Rich. 1993. Aus-

tralia's Polar Dinosaurs. *Scientific American* 269(1): 50-55. Warm-blooded and smallish?

Vista Unified School District. 1993. Science Supplementary Book Review: Available from NCSE for \$.50 + SASE.

Wainright, P.O., G. Hinkle, M-L. Sogin and S.K. Stickel. 1993. Monophyletic Origins of the Metazoa: An Evolutionary Link with Fungi. *Science* 260: 340-342, 16 April. Molecular taxonomy suggests that animals and fungi are more closely related than animals and (most?) plants.

Exec Director Scott Elected to AAPA Office, BSCS Board

Eugenie Scott, NCSE Executive Director, has been elected to the Board of Directors of the Biological Sciences Study Committee (BSCS). BSCS initiated the revolution in biology textbooks via federally-sponsored integration of scientific experts and textbook writers in the early 1960s; it is widely credited with reintroducing evolution into the biology curriculum after fifty years of avoidance after the Scopes Trial in 1925. The 1950's closed with American panic about Sputnik and lackadaisical American science education, and BSCS was one of the "catch up with the Russians" responses. Since then, it has pioneered textbook reforms picked up by private publishers, emphasizing evolution, ecology, and genetics rather than "descriptive" biology in which students were simply asked to memorize parts of animals and plants.

Without an "Evil Empire" to outrance, BSCS faces a more home-grown challenge—the resistance

Weinberg, Steven. 1993. *Dreams of a Final Theory: The Search for the Fundamental Laws of Nature*. NY: Pantheon, 335 pp, \$25. Lucid account of action on the frontier of physics by a Nobel Laureate who thinks final answers are possible.

Weiner, Douglas R. 1993. Review of Todes, *Darwin without Malthus: The Struggle for Existence in Russian Evolutionary Thought* and Vucinich, *Darwin in Russian Thought*. *Isis* 84(1):124-127. Technical review of studies of a creationist bogey—Darwin and the Commies!



Ruse transcript available.



to evolution and critical thinking which is home-grown and can no longer be challenged in the name of an emergency defense against the Russkies. While BSCS has a different agenda than NCSE, it has the same opposition and some of the same goals.

Scott was also elected in 1993 to be Secretary/Treasurer of the American Association of Physical Anthropologists. At their April annual meeting (this year in Toronto), Genie was confirmed, joining the leadership team of this scholarly organization.

AAPA is the association of scholars concerned with human biology and evolution and how they relate to the study of human and other primate behavior, culture, demography, molecular biology, paleontology, nutrition, forensics, etc. Physical anthropology and biological anthropology tend to be interchangeable terms.



Keeping Tabs

Islam and Creationism

John Cole

Dr. T.O. Shanavas writes to report from his viewpoint as an Islamic creationist, that Darwin and Islam are compatible. Quoting Ibn Khaldun, the 14th Century (1332-1406) African philosopher (probably one of the few names of Islamic scholars familiar to Westerners—if any are):

One should look at the world of creation. It started out from minerals and progressed, in an ingenious, gradual manner to plants and animals. The last stage of minerals is connected with the first stage of plants, such as herbs, and seedless plants. The last stage of plants such as palms and vines, is connected with the first stage of animals, such as snails and shellfish which have only the power to touch. The word 'connection' with regard to these created things means that the last stage of each group is fully prepared to become the first stage of the next group.

The animal world then widens, its species become numerous, and, in a gradual process of creation, it finally leads to man, who is able to think and reflect. The higher stage of man is reached from the world of monkeys, in which both sagacity and perception are found, but which has not reached the stage of actual reflection and thinking. At this point we come to the first stage of man after (world of monkeys). This is as far as our

(physical) observation extends.

Khaldun, in context, was arguing for a "Great Chain of Being" idea, not a complete evolutionary theory.

Abu Bayhan al-Biruni (973-1048) wrote that:

The agriculturalist *selects* his corn [grain], letting grow as much as he requires, and tearing out the remainder. The

The last of the animals and the first of mankind is the monkey.



On they rolled to perfection: Thus the meaner world was born. Mineral passed to vegetable life, out of which animal life was born.

Ibn Arabi, 1165-1240

forester leaves those branches which he perceives to be excellent, whilst he cuts away all others. The bees kill those of their kind who only eat, but do not work in their beehive. *Nature proceeds in a similar way. . . .*

All that we do, is to keep steadily in mind that each

organic being is striving to increase in a geometric ratio; that each at some period of its life, during some season of the year, during each generation or at intervals, has to struggle for life and suffer great destruction. . . .

This predates Darwin's arguments for natural selection, using similar analogies, by centuries, although it was not carried through to a testable, naturalistic science. But while al-Biruni and other early scholars did not articulate a fully-developed, testable theory of evolution by natural selection, they anticipated it brilliantly and should give pause to latter-day Muslims who oppose evolution, adopting Christian apologetical arguments rather ahistorically. Willful ignorance of this intellectual tradition inhibited Western scholarship, fostered by the other world-shaking event of 1492—the expulsion of "Moors" from Spain and Europe (and Jews—many of whom fled the Inquisition to the protection of the Ottoman Empire and North African Islamic kingdoms offering refuge).

(Another correspondent writes that this sort of "Islamic apologetics" relies upon shopping around for quotations from early heretics in order to defend modern orthodoxy.)

A forthcoming issue of *C/E* will examine modern Islamic "scientific" creationism in Turkey.

(Quotations are from *Evolution and a Muslim Portrait of Creation*, a book manuscript © T.O. Shanavas; used by permission.) ❖

❖
Great
Chain of
Being
❖

Keeping Tabs

Floods Provide Once-in-a-Lifetime Opportunity

Eugenie C. Scott

We sympathize with members and friends in the Midwest as they cope with this summer's massive floods. We offer our best wishes for good weather and encouragement in the cleanup of the mess.

But it has been brought to our attention (all right, Bill Bennetta is to blame) that the weather has not been a totally unmitigated disaster: creationists have been given a once-in-a-lifetime opportunity to test their theories of Flood Geology! (Not to mention theories about the foci of God's wrath which some creationists have already addressed in the media (the Midwest isn't especially evil, but it's being punished because of support for gay rights and abortion on the coasts, according to Randall Terry, a national Religious Right leader interviewed on NPR's "Fresh Air").

Followers of the theory of "hydrodynamic sorting" should be flocking to Des Moines to determine whether the distribution of fossils in the geological column is mirrored by the deposition of drowned fauna, flora, and small appliances as *these* floodwaters recede. ("Hydrodynamic sorting" allegedly explains why trilobites and other marine forms are found below amphibians, reptiles, and mammals in the geologic column: spherical, round, smooth and streamlined shapes would naturally sink to the bottom first, to be followed by more odd-shaped organisms like tetrapods. Of course, hydrodynamic sorting doesn't explain why turtles and streamlined marine reptiles like plesiosaurs are found above amphibians, or why floating organisms are found all through the sequence, but hey—creationists are still researching this stuff.)

Flood geologists also have an opportunity to determine whether rates of sedimentation are truly as rapid as they claim. The Green River shales, for example, consist of over 5 million annual layers or "varves," laid down (according to those silly evolutionists) one layer at a time each year for over 5 million years. If creationists are correct, the Green river varves would have to have been laid down during the year that the Flood waters were receding; thus the rate of deposition would have had to have been at least one varve every six seconds. The midwest floods are a wonderful opportunity to test lots of creationist theories on catastrophic sedimentation. We can only trust that they are already at work, and that the results of this research will appear in creationist journals soon. Unless, of course, creationists don't really do research. ❖

❖
Were 10
layers or
varves
deposited
each
minute in
Des Moines?
❖

Colorado Springs To Host ICR?

Eugenie C. Scott

In the July, 1993 Institute for Creation Research publication *Acts and Facts*, Henry Morris related that Masterbooks, the ICR's publication wing, had moved from southern California to Colorado Springs, CO. According to the *Rocky Mountain News*, 40 evangelical ministries, including James Dobson's *Focus on the Family*, already make their home in this picturesque Colorado town, employing more than 2,200 people and generating a payroll estimated at \$45 million (*RMN*, 11/15/93:32).

Already ensconced in Colorado Springs is the former Students for Origins Research, now named Access Research Network. Is the ICR going to follow its publisher east? Leaving sinful southern California for the clear air and sympathetic atmosphere of 'Springs? Morris is praying for help with the decision, he writes. He also notes the ICR's California real estate investment. Colorado members, take note! (Thanks to Lara Attwood for *RMN* clipping.) ❖

Ban Science?

Westfield (MA) School Board Member and former Schools Superintendent, William Coscore, quoted in the *Springfield Union-News*, May 17th: "If I had my way, science would be thrown out of the curriculum. I don't know if I got a C in biology." He was arguing for new standards in order to reduce pressures on high school athletes.

Keeping Tabs

US Test Scores Down Again

John Cole

While people debate the meaning and accuracy of standardized tests,

Anthony Standen Dies

Science is a Sacred Cow was published forty years ago by chemist Anthony Standen, establishing his credentials as a skeptical critic of "scientism." Oft-reprinted, his book became a sort of bible of anti-scientists as well as skeptics. A longtime editor of major reference works, Standen was a scientist strongly interested in science education, bemused by his popularity among what he called the "know-nothings" but always disdainful of his scientific colleagues who claimed to know it *all*. He died this summer in his 80s after a long illness. I knew him only via long, delightful correspondence and phone calls. Ironically, his other popular book was about "Insect Invaders"—he treated bugs with more self-confident disdain than he could ever find among the scientists he loved to tease, viewing them (insects, that is) as worthy of nothing but eradication because he had scientifically come to that conclusion! I never thought to ask him if he had ever met Rachel Carson. . . . [JRC]

the 1993 news for the US is bad: Ten years after publication of "A Nation at Risk," a new study finds the US still in comparative trouble. In fact, the Associated Press reports that the US ranks in student science and math achievement behind a number of countries, led by Canada. Other countries's students scoring ahead of the US are: China, England, France, Israel, Korea, Russia, and Taiwan.

The Educational Testing Service report stresses that the different countries have different kinds of samples. Canadian statistics, for example are based on 9 out of 10 provinces rather than the US, Taiwan, France and Korea sample of all students rather than selected groups (Russian-speakers only, in Russia, for example). Nevertheless, the US ranking is clearly low in an absolute sense.

And the US trend is still downward in science and math, although Black, Hispanic and female students' scores on national assessment tests have improved, narrowing their gap from American white males.

SAT scores of US college-bound high school seniors have also declined. In 1969, math and verbal scores were 493/463; in 1992 they were 476/423. 800 is the best possible score in each category, but if I understand the system properly, 200 is a sort of minimum score. To put this in perspective, more students than ever are applying to colleges and taking SAT tests, so the downward score shift might be explained, at least in part, by the fact that more less-prepared students are taking the tests today.

Every science achievement test we know of shows US students, on average, falling more and more behind international averages. Arguments that the sample of US students tested are more likely to be marginally-prepared than the college-bound students in other countries where a college education is comparatively rare explain some of the data; that the tests are inaccurate could explain some of the results; however, the basic data more and more show that US science education produces fewer good students than it should, all things considered. ❖

US R&D Investment Lags

According to the National Science Board, reported in the *NY Times* in February, Research and development budgets for 1987 included the following details of interest, with projections into the 1993 percentages of national R&D budgets of selected countries:

| | France | Germany | Japan | UK | US |
|-------------|--------|---------|-------|------|-------|
| Industry | 10.6 | 15.3 | 4.6 | 8.7 | 0.2% |
| Environment | 3.2 | 1.9 | 1.8 | 1.6 | 1.8% |
| Education | 26.6 | 43.8 | 50.8 | 20.2 | 3.6% |
| Defense | 34.1 | 12.5 | 4.5 | 50.3 | 66.6% |

Keeping Tabs

Creation Research Society Gets Arizona Headquarters

Eugenie C. Scott

The Creation Research Society, publisher of the *Creation Research Society Quarterly*, announced in March, 1993, that it will build a creation "science" research station in Chino, AZ. The research facility, named the Van Andel Research Center, will contain several laboratories, shops and a library. Biologist John R. Meyer, formerly at Baptist Bible College in Clark's Summit, PA, will direct the center.

According to a newspaper article, the goals of the new center will be to study such topics as the "reevaluation of the geology and origin of the Grand Canyon, limits in the variation of plant and animal populations, reevaluation of the fossil record, and a complete study of geological dating procedures" (*Prescott Courier*, 4/5/93, p.3B). They anticipate that up to five full-time scientists will work there, and there will also be space for visiting members of the Creation Research Society. ❖

Gifts

You might want to consider gifts to NCSE as memorials or celebrations dedicated to others. When rich Uncle Don gets married and you don't know what to give him, why not either a gift to NCSE in his name or a membership? NCSE will acknowledge and thank him for your interest! Similarly, a gift to NCSE can be a worthwhile living memorial when someone dies, and we can acknowledge such a gift to whatever person you designate, if you wish us to do so. Contributions are tax deductible to the full extent allowed by law.

❖
CRS to
Arizona;
SOR to
Colorado,
and ICR,
too?

❖

Canadian Survey: Majority

A survey/poll of Canadian religious attitudes indicates that 53% of Canadian adults reject "the theory of scientific evolution." 32% "believe that the Bible is God's word, to be taken literally word for word."

The Religion Poll results come from a January-March telephone survey of a randomly selected sample of 4,510 Canadians over the age of 18; the statistical degree of confidence is plus or minus 1.5% at the 95% confidence level. ❖

These and other results are reported by the Canadian magazine *MacLean's*, 12 April 1993, pp. 32-37. The survey shows a higher degree of belief than in church attendance, and it shows much more active belief among conservative and pentecostal church members than among the more traditional Canadian churches—Anglicans, Roman Catholics, United Church, etc. 78% identify themselves as Christians, 1% as Jews. Almost 20% said they had no religion, and 9% of respondents agreed strongly that God is "just an old superstition."

Feminism and Evolution

Televangelist Jerry Falwell has explained yet another danger of evolution: teaching it leads to feminism, a horrible kind of thing which grows into all its ugly details by the rejection of the idea that man (Man?) was created first and dominant, then woman as his helper.

The ICR's Henry Morris has long written that every "ism" he dislikes stems from evolu-

tion—communism, fascism, feminism, environmentalism, humanism, atheism, oneworldism (*sic*). . . . Falwell's national appeal has been slightly broader in scope than the full-time creationists, combining religious and political conservatism.

(Thanks to Ranse Traxler, intrepid monitor of Falwell and other broadcasts.) ❖

Vista *con't from p. 1*

this book. . . . The book contains no opportunities to experiment with any topics. There are no activities, literature selections, math questions, discussion questions, etc.

List the potential positive aspects of introducing this book into the science curriculum. *The committee could find no positive aspects of introducing this book into the science curriculum. (Negative aspects) There are two arguments against the use of this book. First, the teacher and the student would need a broad scientific background, making the time needed to understand the book beyond the scope of a high school course. Second, the readability is too complex for a high school student.*

No sooner was this attempt to sneak creationism into the curriculum defeated, but the creation-supporters on the board

submitted a resolution that would allow a loophole for the teaching of creationism. At the May Board meeting, the following "proposed policy" was submitted by board president Diedre Holliday:

1. *No theory of science shall be taught dogmatically and no student shall be compelled to believe or accept any theory presented in the curricula.*
2. *To enhance positive scientific exploration and dialogue, weaknesses that substantially challenge theories in evolution should be presented.*
3. *Discussions of divine creation, ultimate purposes or ultimate causes (the why) shall be included at appropriate times in the history, social sciences, and/or English language arts curricula.*

Point 1 is extracted from the California science framework, and is a

largely harmless statement. During public discussion, it was pointed out that Point 2 singled evolution out for special treatment, and was therefore highly illegal, so Mrs. Holliday offered alternate wording *To enhance scientific exploration and dialogue, scientific evidence that challenges any theory in science should be presented.* The intent of the resolution, of course, is to single out evolution for special treatment. (See box, p. 8)

Statement 3 is also derived from the California Science Framework, and is intended to allow discussion about creationism or other religious ideas, for example, in comparative religion classes. It has been used as a loophole to *advocate* creation science (teach it as valid scholarship) in nonscience courses.

According to newspaper accounts, over 500 people showed up for the May 20 meeting, ("even though it meant skipping the final episode of 'Cheers.'") In a true turnabout from the usual situation, pro-evolutionists outnumbered the anti's approximately 3:1, according to NCSE member and local activist Larry Lovell. Lovell and other members of the citizen's group did a great job turning out a crowd.

Vista teachers also rallied, and reminded the board that there are procedures for curriculum changes, and that they jolly well better follow them and submit the resolution to a teacher committee. By the end of the meeting, the board had agreed, and sent the resolution to the curriculum committee.

Although teachers are technically on vacation, the Board demanded quick action on the resolution, and insisted the teacher committee respond this summer—a time when

Vista, cont'd on p. 23

More on Creationism in Eastern Europe

Russian educators desperately need creationist textbooks. Or so says the Roger Oakland Ministries of Santa Ana, CA, which reports that the Russian Department of Education, through its Deputy Minister of Education Dr. Alexander Asmolov, has asked for two million copies of the book *The Evidence for Creation*.

Roger Oakland is, of course, anxious to oblige, although he requests large donations from his followers to make this possible. He says he is in Moscow arranging the publication of

the first 250,000 copies as he writes (March 31st). A donation of \$30 is requested; that sum will place 200 of his books in "the hands of Russian teachers and students."

We have reported before on the creationist assault on schools in the former Soviet Bloc, so this should be no surprise. NCSE cannot begin to match the creationists' budgets, but small amounts of good science can be distributed in the hope of providing reference material for Russian scholars and teachers and politicians.

Letters

How Well Do We Make the Case?

I think you're doing a fine job with the newsletter and magazine. I like the little humorous touches that get in. And your tribute to Asimov (12(2)) was the best I've seen. . . .

I still have some reservations about C/E, perhaps because I misperceive whom it's meant for. If it's meant for those convinced that evolution occurred, then I suppose the goal is to provide us with ammunition. But even I, better informed than most, sometimes feel baffled by the technical stuff, and I think footnotes are a distraction, definitely off-putting.

The real point, and I'd like to see much more stress on this long-range goal of NCSE, is that creation "science" is not science at all. "Debates" are exercises in futility, lending spurious credi-

bility to creationist "science." And another point is that taking the Bible literally is only one way of reading (or misreading) it. I made this point when I spoke a while ago in Dubuque, IA, quoting Shakespeare and *Job* and other poetry and demonstrating how much they lose if they are simply understood literally.

Betty McCollister
Iowa City, IA

Re: C/E: *The audience is mixed; the goal is to provide more detailed (and "footnoted") information for people who need it, but we want it to be readable. I urge contributors to convert from academic jargon mode to English, and I copyedit to accomplish this goal but apparently do not always succeed! I also hear complaints that the journal is too "populariz-*

ing" and nontechnical but aim to err in the opposite direction. Footnotes and documentation can be important but should not be off-putting. Part of the problem is that NCSE really does try to address multiple audiences at the same time and cannot afford to set up different "tracks!" Every academic writer should perhaps be forced to spend a little time as a newspaper or magazine intern or reporter in order to qualify for a Ph.D., but in the interim those of us who have this dual experience try to act as intermediaries and translators, cheering on people from either side of the potential divide when they try to communicate with each other.

Life Line?

Your publications are a lifeline for me, teaching in a rural town where absolutely no

one shares my view that evolution makes great good sense. When people sometimes get restive about the matter, I can simply refer them to NCSE articles and say, "It's not just MY opinion. . . ." The opposition is constant but not intense, and you help defuse potential problems.

(Name and address withheld)

Just wanted to express my admiration for your fine work. I especially enjoyed the extensive critique of Phillip Johnson's *Darwin on Trial* by Eugenie Scott and Thomas Sager in C/E 31. Enclosed is a copy of a letter I sent to CBS after viewing "The Incredible Discovery of Noah's Ark." I have not yet received a reply [mid-April].

Theodore R. Treadwell
Allston, MA

Vista *con't from p. 22*

fewer parents and teachers are likely to attend the Board meetings. At the August 12 board meeting, the Board modified paragraph C to read *Discussions of divine creation, ultimate purposes, or ultimate causes (the "why") are included [rather than "shall be included"] at appropriate times in the history-social sciences and/or English-language arts curricula.*

Teachers union representative (and science teacher) Tom Conry downplayed the significance of the resolution. He told NCSE that he doesn't think that

any changes in the curriculum will need to be made, and that "teachers can just continue teaching what they have before."

But there is a proverb about not letting the nose of the camel into the tent because soon you have the head of the camel, the forequarters, and before long, the whole camel in your tent, and you are outside. The Vista resolution is the camel's nose of creationism.

California teachers are required to teach prehistory in sixth grade; some call it "the

caveman unit." Standard textbook archaeology and paleoanthropology are now to be "supplemented" with creation "science" (or even Biblical creationism) by some teachers, using the history and social science curriculum as a loophole. How much easier will it be for Vista teachers with this inclination to promote creationism with a school board-mandated resolution cheering them on!

The Vista resolution is also a green light for parents who object to teaching evolution to pressure teachers to *not* teach it, or to give "equal time" to crea-

tionism. This already occurs in California and elsewhere, and the Vista resolution will doubtless encourage the practice.

Citizens in Vista will keep tabs on the situation to determine what, exactly, is being taught under the resolution, and we'll keep you posted. NCSE members in other parts of the country can monitor their school districts to ensure that Vista-like resolutions do not metastasize. Keep us informed! ❖

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