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Eugenie C. Scott

Some hard work in Ohio seems to have headed off a pending school policy to require teaching "alternatives to evolution."

Louisville, OH had a curriculum guide in 1986 which required 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. 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, p. B4).

In 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

Creationism, cont'd on p. 5

Creationism Trial Headed Off



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the *Rocky Mountain News*.

Have you seen *your* local school committee or curriculum lately? The next national debate may be very local: In the guise of promoting "parental control" or choice (which sounds fine), the Religious Right is diligently trying to privatize education and direct tax dollars towards "Christian" and often creationist education. This issue looks at California, Montana and Massachusetts examples.

People often tell me, "There's no problem HERE." Wrong (often).

I also hear the more cynical observation that anti-evolutionism will only affect kids who are not cut out to be scientists, anyway, or even that it will filter out a lot of students who might otherwise have gone to college but will now be directed into a somehow better educational and career path.

Sure, some good students will always figure out that anti-evolutionism is wrong, but what if they have to do this in a sort of secretive, pro-evolutionist cabal, presumably with secret hand signs? Won't a lot of good students be scared off? Is the ideal of universal education to be abandoned in favor of letting only the chosen few in on the "good stuff?" Doesn't this waste the huge potential of the major-

ity of students who might turn out to be scientists, after all? We probably agree. The question is, how do we get our friends to agree and to join in?

Well, surprise—The students taught bad science and anti-science become voters, school board members (I quoted one in our last issue who thought science should be eliminated from his school because it interfered with football), members of Congress, etc. An article in this issue on Carl Baugh, discredited "discoverer" of Paluxy Creek "Man tracks" in stone, cites Baugh's claim of support from ex-Vice President Dan Quayle and his wealthy father!

A huge number of people depend on us because they know we're "there," but others think the issue is just sort of amusing—"Why do you waste your energy trying to make rational arguments?" is a question I've been asked by a colleague who bemoans the frequent ignorance of her incoming college students. How does one respond to this?!

Whenever I hear "It can't happen here," I remember the old Sinclair Lewis novel by that name from the '30's and get a bit worried about friends who don't know history.

John Cole

How Does a Back-to-Genesis Seminar Affect Rural America?

David W. Baker

An ACLU lawyer recently met with the school administration in Stanford, Montana, concerning the apparent endorsement and promotion of a "Back-to-Genesis" seminar put on by the Institute for Creation Research in Great Falls on September 24-25, 1993. Stanford is a small farming and ranching community in central Montana with a population of about 600. Fundamentalist churches throughout the area urged their members to attend the seminar. In Stanford, Mrs. Diana Roen, chairman of the local school board, actively promoted the ICR seminar. As noted in the ACLU complaint, she called parents of elementary students to ask them to send their children to this "assembly for school children."

Krista Kochivar, a senior at Stanford High School, alerted the ACLU. She said the football coach had gone into classrooms handing out ICR's brochure during class time. A classmate informed Kochivar that they were going on a field trip to the "assembly" in Great Falls. When Kochivar appeared at the school board meeting to question the legality of the trip, according to Kochivar, chairman Diana Roen made a crude remark to the young woman to humiliate her in public.

Krista Kochivar deserves commendation for stating her case to the board. The school board nevertheless decided to allow the Calvary Church to rent school buses for a nominal fee to transport the stu-

dents and to allow students to use one of four "personal" days that each student is allotted each year. (The most frequent use of such personal days is on the first day of hunting season.)

According to Ken Ham, ICR seminar speaker, 57 students attended from Stanford. Elementary school students found out "What Really Happened to the Dinosaurs." They were told that dinosaurs are still alive today and that dinosaur and human footprints have been found together in the same rock outcrop [see *C/E* No. 15]. High school students were shown pictures of logs floating on Spirit Lake after the Mount St. Helens volcanic eruption and told how this "proved" that coal could form quickly—for example, in a really big flood. The presentations were classic pseudoscience.

On Saturday, September 25, a short article in the *Great Falls Tribune* noted the ACLU complaint. That afternoon Ken Ham asked a packed auditorium in the Great Falls Civic Center to pray for the "courageous Christians" who were being persecuted by the ACLU.

When I talked with four of the five Stanford school board members, the only one who refused to discuss the ICR seminar was chairman Diana Roen.

The next issue of the *Judith Basin Press*, the local weekly newspaper, published the full text of the ACLU complaint. Letters to the editor criticized the actions of Roen and called for her to resign. My own letter to the paper discussed the ex-

treme religious character of the seminar, noting that Ken Ham had preached intolerance, labelling the beliefs of mainstream churches as "the work of Satan," for example, and making nasty jokes and comments about "working" women and "feminazis."

An outraged rancher's wife sent me a letter telling me I have a "hard heart" if I was unconvinced by the seminar and that I should "mind my own business"—a clear indication that the "scientific" creationists do not like their machinations aired in public.

The next edition of the weekly brought a long tirade from Randy Triplett, the football coach and former elementary school teacher who had distributed the ICR brochures in classrooms. He quoted, among others, Henry Morris, Ken Ham, and Malcolm Muggridge to show "there are little or no facts to back the evolutionary theory."

Life moves pretty slowly in a small town, so people are used to creating their own amusement and excitement. The most revealing comment about small town life was overheard at the auto parts store. One man observed that the big arguments between factions of the community usually develop in the middle of winter. The current fuss just meant that "they are starting earlier this year." The ACLU complaint is on the agenda for November. Expect the biggest attendance of the year.

Dr. Baker, Montana CC Liaison, is a geologist at Conceptual Engineering, Great Falls, MT. ❖

❖
Ken Ham:
Mainstream
church
beliefs are
"the work of
Satan"



California Prop 174—

**Molleen Matsumura
and John Cole**

A November ballot initiative in California could deal a severe blow to public schools and the teaching of evolution.

Proposition 174, called the "Parental Choice Initiative," would transfer funds directly from public school budgets to "voucher redeeming schools" which enroll K-12 students. The state of California pays each school about \$5,200 per student, based on average daily attendance (and ranks in the lowest 20% of states in per-student expenditure). Although a student using a voucher would receive approximately \$2,600, education would lose the full \$5,200 because the state would return the remaining \$2,600 to the general budget *not* to the education fund. Each student transferring from a public school to a private one, therefore, would "cost" education dearly. Worse, there is already a large number of students in private schools whose parents would doubtless apply for vouchers, thus immediately reducing the amount in the already strapped education budget.

Each voucher would initially amount to a bit over \$2600—not enough to pay the costs of most private schools lacking church subsidies. This would be a lucrative windfall for families with students already enrolled in private schools, however, and it would undoubtedly attract additional students to religious schools.

Although Prop 174 would allow discrimination in admissions

based on gender, handicap or disability, religion, sexual preference, and other criteria, racial or ethnic discrimination would be barred. In addition, students could be expelled if they were deemed by the school to not be adequately benefitting from the school. Public schools would be left with all such "difficult students" and "rejects"—with drastically-reduced budgets. (A "special needs" student can easily cost a school \$15,000 or more per year, for example, and would be an unlikely recruit for a voucher-redeeming school.)

Already, 75% of California private schools are sectarian. The figure is 85% in New York and approaches 100% in states without a prep school tradition. Voucher education would be religious education, for most students and in most states—often by denominations that reject evolution.

California school budgets have been slashed already in the wake of the tax-capping Proposition 13; Prop 174 would turn over \$1.6 billion dollars immediately to students already in private schools, devastating an already cash-crippled system. The effect is less clear when projected to cover students who might now transfer out of public schools—a number no one agrees upon. No doubt some transfers would occur, but the \$2600 subsidy would not pay full costs at most private schools, dimming the promise of "school choice for all" Prop 174 advocates extol.

The law would prohibit any state regulation of private school curricula unless the regulation were passed by 75% of the state legis-

lature—well-nigh impossible. Private schools are known for idiosyncratic curricula (see *Mendez: Visions of Reality: What Fundamentalist Schools Teach*), where evolution is not guaranteed a place in a student's science education. The *Oakland Tribune* (24 Oct) profiled several private schools which would be eligible for vouchers. "The difference is we try to integrate Biblical principles in the lessons," said the Fremont Christian School superintendent. "We teach evolution, but as a theory, so our kids won't be culturally ignorant. We teach creationism as a fact. I think public school kids are being deprived because they aren't being exposed to both views."

As more students pass from public schools where the curriculum is shaped by a series of subject-based guidelines (such as the California Science Framework), fewer and fewer of them will be exposed to evolution as a fundamental principle of science. The slow progress NCSE has helped forge on the textbook front could be seriously damaged, with nationwide ramifications.

It is no coincidence that Prop 174 appears on the ballot just a few years after California's adoption of a social studies framework that requires teaching about the roles of *many* religions, and a science framework mandating the teaching of evolutionary biology.

NCSE's efforts to keep evolution in the classroom has necessarily been directed at *public school* classrooms. It's a struggle, but it's a struggle which can be won. But if Prop 174 passes, and other

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"We teach evolution, but as a theory, so our kids won't be culturally ignorant. We teach creationism as a fact."
❖

Vouchers for Religious Schools

states predictably follow suit, educational standards could be devastated. Chicago's Democratic mayor Richard Daley has endorsed a similar plan this Fall, and leading Massachusetts politicians in both parties have endorsed a parochial constitutional amendment.

The California Teachers Association and others are waging a strong and expensive campaign against the ballot initiative, and it

has become a well-financed nationwide rallying point for religious right and other conservatives, as well. For example, columnist George Will has written that Prop 174 offers America the chance to strike a blow against socialism—the socialistic idea of public schools. California Governor Pete Wilson, initially neutral or even mildly supportive of the initiative (he placed it on the Fall ballot earlier than required), came out against

the plan October 5th, a day after President Clinton had denounced it. Wilson and other Republicans worry about its financial implications to cash-strapped state and local budgets. Win or lose, this is the opening battle of a longer struggle over educational standards.

Matsumura is a writer and editor who currently heads the NCSE Network/Committees of Correspondence Project.

❖
“Creation, as far as I’m concerned, is the only alternative.”

—Ohio creationist



Creationism *con't from p.1*

defend the district *pro bono* if a lawsuit were filed. (The Rutherford Institute was originally involved in the lawsuit *Peloza v. San Juan Capistrano*, but eventually withdrew after a dispute with Peloza's lawyer over legal strategy.)

In August, 1993, the school district, under threat of a suit from the ACLU, voted to suspend its policy. The Ohio State Department of Education is currently reviewing and revising the state curriculum, and the Louisville district has decided to hold up its policy until the state science curriculum is released.

Ohio NCSE members might want to make some inquiries to insure that the process includes safeguards for the teaching of evolution, and that the final curriculum is specific about the definition of science as excluding supernaturally-based explanations such as special creation. ❖

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Dan Quayle on Noah's Ark?

Bret A. Corum

Thanks to Dan Quayle, Rev. Carl Baugh says he has an exclusive 49 year lease from the Turkish government to conduct excavations on Mount Ararat in search of Noah's Ark. His group plans to excavate Ahora Gorge, an alleged Ark site, and a monastery, buried by volcanic activity, that supposedly housed artifacts from the Ark. The agreement calls for him to build a medical facility for the local people nearby. He plans to build a 3-story museum modelled after the Ark at the base of Mt. Ararat. His crew will drag down pieces of the Ark for display at the museum, and the top floor will be outfitted with telescopes so visitors can look at the Ark *in situ* on the mountainside. They intend to use high-powered lasers to keep the excavated Ark free of ice.

He claims that the agreement was routed to the Turkish Embassy in the US through the auspices of Vice President Dan Quayle's office. Baugh implies that this was done while Quayle was still in office but handled unofficially. He also says that the Vice President's father, Jim Quayle, is an honorary member of the inner circle (or some designation to that effect) of Baugh's team working on the Ark project.

I heard Baugh speak last spring at the First Independent Church of Grand Prairie, Texas—a Dallas suburb. This was soon after his appearance as an expert on the discredited CBS TV "Noah's Ark" show (see *Reports* 13(1), 13(2)).

Until now, Baugh has been better-known as the increasingly lonely proponent of human and dinosaur footprints being found together along Paluxy Creek near Glen Rose, TX (see *CIE* 15, etc.). He continues to tout these claims which have been investigated by scientists including three NCSE Board Members, Ronnie Hastings, Laurie Godfrey and John Cole, other experts such as Glen Kuban—and thoroughly-enough debunked that John Morris of the ICR withdrew his popular book, *Tracking Those Incredible Dinosaurs...and the People Who Knew Them* (or so ICR claimed; the book apparently remained available for some time, however).

Baugh also continues to pitch his ferromagnetic, fiber optic (and virtually every other mutually exclusive characteristics you can imagine) ice shell encasing the Earth to protect the rest of the

Universe from Earth's harmful effects. I refer to this as the "Bozone Layer," quoting Gary Larson's Far Side cartoon layer of clowns circling the Earth. Baugh details his crackpot "theory" in *Panorama of Creation*, which he'd be happy to sell you. In it he claims that NASA discovered that digitized symphonic music, in a major key, is being beamed to the Earth from the stars. Of course, he fails to cite a NASA document to back up his case—or rather to indicate whatever he might be misunderstanding.

The Glen Rose Ark Museum hosted its second annual Creationism Fair in June; after ten years or more, Baugh's "museum" consists of one end of a mobile home. The Turkish government should visit it. ❖

Mr. Corum is an NCSE member in Fort Worth, Texas.

Willaim F. Buckley Special on Religious Right

A special two-hour edition of William F. Buckley's *Firing Line* on PBS (September 17, 1993) debated the proposition: "Resolved: There Is No Danger from the Religious Right." Among the various panelists were televangelist Pat Robertson, an ACLU leader, and a rabbi supporting the Christian Coalition's "family values" theme. Creationism came up a few times, but most of the attention was devoted to tax aid to religious schools, abortion and AIDS education. Buckley shrugged off

the advocacy of creationism in schools as a minor irrelevancy, looking slightly embarrassed.

The fireworks were fairly dull as RR leaders often downplayed their demands ("Aw, shucks...") when past comments were quoted by the liberals. From an NCSE viewpoint, the interesting part was simply that creationism was clearly being treated as part of a package and that mainstream conservatives such as Buckley did not pounce on this as "dangerous." ❖

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News

Massachusetts "Family Values" Debate Widens

John Cole

A Massachusetts battle is shaping up over teaching "family values" in public schools. Across the state, local groups are rallying to change curricula which they say offend religious and family values. Some of the "family issues" cited in news reports include sex education and AIDS awareness, "multiculturalism," disrespect for capitalism, and bans on Judaeo-Christian teachings in schools.

"I've come to the conclusion that God never meant us to separate church and government," says David Floyd of Framingham, MA, at a recent Christian Coalition "Leadership Training School" in Weymouth (*Boston Sunday Globe* 10/17/1993, p. 37).

Local critics of public schools have so far not usually been quoted as advocating teaching creationism. However, they cite as their models the examples of Vista, CA and other places where creationism has been hot on the heels of "stealth candidates" pushed by the Christian Coalition on a "family values" campaign.

The Boston Globe and *Daily Hampshire Gazette* featured major stories on the phenomenon August 27th, just a week after a National Public Radio broadcast on the "family values" movement in Vista. NPR interviews with creationists made it clear that they were using "values" as their latest code word.

The October 10th *Boston Sunday Globe* carried a front page story

on the local movement. Nancy Sutton of Medford, founder of the 3-year-old Family First Inc., says "This is a national thing. It is not just Massachusetts. . . . Parents can no longer trust the schools to educate their children appropriately." She made clear in her interview that she and other groups had a more sweeping agenda than the currently hot topic of sex education: restoration of "prayer to public schools, teaching creationism over evolution, ending abortion, stopping — 'special rights' for gays, and supporting home schooling and church-based education," to quote *Globe* reporters Laura Papano and Amy Sessler.

Sutton was long a state leader of Concerned Women of America, the national group founded by Beverly and Tim LaHaye. (Mr. LaHaye was co-founder of Heritage College and the associated Institute for Creation Research and its Graduate School.)

Homer Allen, editor of *The Standard of New England* and founder of the Pilgrim Family Institute (an affiliate of the Focus on the Family ministry), says in the same article, "Conservatives are starting to realize it's time to say, 'Enough is enough.' "

The Massachusetts debate is especially significant because it comes at the beginning of a year of state-wide education reform in which new parent and community committees will be given powerful new control over school curricula. School boards, superintendents and principals will relinquish much of

their power to these yet-to-be-formed parent committees. In addition, state law has abolished teacher tenure and now also gives school committees greater leeway to dismiss teachers regardless of seniority. Teacher unions are nervous about both job security and curriculum integrity but have been supportive of the need for change. [See related story on p. 9]

Democratic Senate President William Bulger has long pushed for a constitutional amendment to allow state support of religious schools. On November 2, Pittsfield voters are expected to pass a referendum calling for a voucher system to transfer the amount spent on public schooling for each child to the parochial school of parents' choice.

Tremendous discontent with crumbling systems lead many people to focus on schools as the prime cause of most social problems. As a handy scapegoat, schools are fought over by various factions. As one organizer put it at a meeting I attended, "No matter how different they are, there's one group every American hates until the day he dies, and that's teachers."

Vista School Board Rejects State Money

National Public Radio reported in August that the Vista, CA school board, recently taken over by "family values" and creationism advocates (see *Reports* 13(1), 13(2)), has voted to reject a \$400,000 social service grant from the state. The programs of subsidized school lunches, inoculation programs, etc. were deemed to be an interference with parental rights, even though participation was voluntary.

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"No matter how different they are, there's one group every American hates until the day he dies, and that's teachers."
❖

Israeli Right Attacks *Jurassic Park*

Some ultra-orthodox rabbis object to the popularity of the *Jurassic Park* movie in Israel—and to the popularity of dinosaurs, in general. Dinomania is contrary to Scripture, they say. According to the *New York Times* (4 August 1993), the agency which certifies food as kosher has been asked to decertify Tera Dairy, a company which uses pictures of dinosaurs in its advertising campaign.

"It's inconceivable that we should give our seal of approval to a product" endorsing heresy, said a spokesman for the Agudath Israel Party. "The dinosaur is presented in encyclopedias as an animal that is millions of years old, despite the fact that the world was created only 5,753 years ago."

The dairy said it would take this view under advisement, as did film distributors and the Jerusalem Mall theatres.

CBS Anchorman Dan Rather on Noah's Ark

John Cole

Speaking at the national meeting of the Radio and Television News Directors Association in Miami on September 28th, CBS's Dan Rather criticized what he saw as a tendency towards "powder puff, not probing interviews." Too much of TV news was going for sensational pictures at the expense of detail and depth, the *New York Times* (10/1/93) reported. "We all should be ashamed of what we have and have not done measured against what we could do."

Rather also criticized TV executives for blurring the distinction between news and entertainment. *They "freely take an hour that might have been used for a documentary and hand it over to a quote-unquote 'entertainment special' about the discovery of Noah's Ark that turns out to be a 100 percent hoax"* (emphasis added). Readers will recognize a barely veiled reference to CBS Television's broadcast of pseudo-documentaries produced jointly with Sun International (Reports 13(1); 13(2), etc.).

The *Times* implied that Rather's barb was directed towards a forthcoming series, however. Perhaps the critique applies to this future broadcast, as well: It seems CBS will be broadcasting a full hour television version of the supermarket tabloid, *Weekly World News*. One of the program's segments is reported to deal with the discovery of Noah's Ark.

Did CBS learn from its recent archaeological fiasco? Not much, it seems, although perhaps by scheduling the topic in a self-announced sideshow atmosphere they will claim that this time it's clearer that "it's all in fun."

Media critics generally applauded Rather's comments, and some speculated about whether his speech was a sort of farewell address. Not so, he replied. However, the parallel between his comments and those of Edward J. Murrow, his venerated CBS predecessor, are striking; Murrow said much the same thing at a broadcasters' convention just before leaving the network 30-odd years ago. ❖

❖
"If we find more basic building blocks of the Universe, it's not going to change the way people live."
❖

Supercollision

In the wake of Congressional defeat of the US Superconducting Supercollider, there are serious issues about support for "big science" versus "little science" and similar intellectual issues. There are also other thoughts.

"If we find more basic building blocks of the Universe, it's not going to change the way people live," said Rep. Martin R. Hoke (R-OH).

"It's not something I stayed up at night reading about," said Rep. Ernest J. Istook Jr. (D-OK).

Twenty five years ago, 5.2% of the federal budget was devoted to nonmilitary scientific research; last year the figure was 1.8%.

(SOURCE: *New York Times* 10/26/1993.) ❖

Computer Bulletin Board Phone Number

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The BBS is accessible via other network systems such as Internet, Usenet, etc.

News

California Poll Shows Creationism Support, Strong Religious Right

Eugenie C. Scott

A Field Institute poll published in September, 1993 shows 45% of Californians are in favor of teaching both evolution and the biblical version of creation in public schools. A comparatively high 44% supports the teaching only of evolution, while only 7% favor teaching only creationism. Forty-eight percent of Californians favor a constitutional amendment permitting prayer in public schools.

The sample was broken down by religious and political preference for further analysis. "Religious" Californians were those who were "born again" or who answered "yes" when asked whether religion was "very important" in their lives. "Religious" individuals could be either "Religious Right" or "Religious Moderates," depending on their political self-definition: liberal, conservative, or middle-of-the-road. Individuals who classified themselves as politically liberal included both non-religious as well as religious individuals. This rather amorphous group was termed "Secularists," and contrasted with the Religious Right and Religious Moderates.

Needless to say, attitudes about teaching evolution vs. Biblical creation varied considerably among these groups, which was favored by 60% of the Religious Right group, 56% of the Religious Moderates, and only 33% of the Secularists. Secularists preferred only evolution be taught

by 61% to 16% (Religious Right) and 33% (Religious Moderates).

In California as a whole, the Religious Right category comprises one-fifth (21%) of the population, while Religious Moderates compose 25% and Secularists 54%. (Recall that Secularists include liberals of

all religious persuasions.) Although composing only a small portion of the electorate, if the Religious Right votes as a block and at high percentages, as it often does, it can be very influential in elections when there is a small turnout—such as school board elections. ❖

Gallup Reports High Level of Belief in Creationism

Eugenie C. Scott

In a June 1993 survey, results of which were released in September, Gallup surveyed a national sample of adults, asking the same questions it has asked in 1982 and 1991.

Belief in a literal creation was ascertained by agreement with the statement, "God created humankind in its present form about 10,000 years ago." A more theistic evolutionist perspective was reflected in answers to "Humans have evolved over millions of years from less-advanced forms of life, but God guided this process."

Finally, Gallup asked "Humankind has developed over millions of years from less advanced forms of life. God had no part in this process." Results are below.

Percentages of belief in a literal Biblical creation (including special creation of humans and a young earth) has held steady over the last two years. The number of theistic evolutionists appears to have dropped slightly, and there may be a slight increase in those holding to a purely naturalistic view (though the margin of error is +/- 5%).

NCSE reported on a recent Gallup poll of teenagers (Reports 13(2):11) showing that 52% answered positively to the theistic evolutionist question, considerably more frequently than that of adults. Ten percent, essentially identical to the adult 11%, agreed with the purely naturalistic evolution question. The Biblical literalist creation question was not directly asked, but answers to a similar question suggested that 45% of teens 13-15 believe that the whole Bible is literally true.

❖
Poll: 47% in
U.S.
support
literal
creation.
❖

	1982	1991	1993
Literal Creation	44	47	47
Guided (theistic) Evolution	38	40	35
Purely Naturalistic Evolution	9	9	11
No Opinion	9	4	7

Tracking Those

The Myth of the Geological Overthrust Myth

David Baker
Montana CC Liaison

For the last 80 years Montana geology, especially Glacier National Park, has been a cornerstone of creationist arguments against the long geological history of the Earth. As layer after layer of sediments were deposited over geologic time, the plants and animals buried in them changed so much that geologists use their fossilized remains to determine the age of rocks. Stratigraphy is a basic principle of geology—younger fossils are above, older rocks and their fossils below.

However, in Glacier National Park, the Great Lewis thrust fault (named after the explorer, Captain Meriwether Lewis) placed older rocks on top of younger rocks long after deposition ceased. The most famous locality is the well-known landmark, Chief Mountain, which rises abruptly above the gentle slopes below, on the east side of the park.

The Lewis thrust and parallel faults are responsible for the Rocky Mountain Front, a topographic boundary between mountains and plains extending from Augusta to Alberta. Movement along the thrust fault caused deeply buried 1.6 billion year old rocks to be transported horizontally a minimum of 30 miles to the northeast and to be raised vertically more than a mile so that they now rest atop soft shales only 100 million years old.

However, according to the 25 creationist books written by George McCready Price during the first

half of this century and the many "scientific" creationist books and articles based on his writings since the 1950s, the Lewis thrust fault does not exist. Price made his "discovery" without benefit of fieldwork. He concluded that published interpretations by the many geologists who had worked on the fault were all wrong because there are places where the beds above and below the fault appear parallel, es-

pecially when viewed from a distance. Since the fault does not exist, according to Price and his followers, it is the fossils rather than the beds that are out of order. He argued that this prohibits one from using the fossils for determining the age of rocks and that one is justified in discarding all geological history and substituting the account of the Great Flood of Noah.

Creationism in the Ukraine

Grigory A. Naumovets

The situation in Ukraine and Russia with respect to science education and the evolution/creationism issue is quite different from that in the US and Canada. So far, the influence of "scientific" creationists is weaker here. However, I think that the NCSE activities are by no means irrelevant for us.

Under the Communist regime, no religious propaganda was allowed in public schools (and all schools were public), while "Scientific Communism" and "Scientific Atheism" courses were compulsory. Both Communist and Darwinist doctrines were beyond any doubt; any non-Marxist philosophical doctrines were more scoffed at than seriously criticized—they all were labelled wrong just for the simple reason that they were "bourgeois" and "reactionary." Now, many people here think that Marxist doctrine is wrong just for the simple reason that "it has lead us to the poor state we are presently in." Some kind of "religious revival" is taking place here, but I don't think "scientific crea-

tionism" is likely to be introduced into Ukrainian public school curricula in the near future. However, I'm afraid that evolution is not understood well by most people here. Recently I saw on a non-state television channel an American film promoting "scientific" creationism, and I think that many teachers here are unprepared for such a level of argument—they are simply unused to the fact that evolution may be seriously questioned (especially in its vulgarized and simplified form taught in our schools).

Therefore, NCSE activities are quite important for the ex-USSR countries. I would be happy to become a member. Unfortunately, for the time being, I cannot afford it because of the grave state of the Ukrainian economy and exchange rates which make our salaries look like nothing when changed to outside currency. But let me stress once again that I support NCSE and its activities. ♦

Institute of Semiconductor Physics, Academy of Sciences of the Ukraine, Prospekt Nauki 45, 252650 Kiev-28, Ukraine

Incredible Creationists

Of course, the Lewis thrust *does* exist.

Most of the rock formations above and below the thrust fault were deposited as mud in a sea bed. Because pressure and temperature increase with depth of burial, deeply buried mud is compacted and "cooked." You can easily see the soft shales below the thrust fault exposed along U.S. Highway 2 between East Glacier and Marias Pass. They crumble in your hand. However, just try using your bare hands to break the green or red metamorphosed shale (argillite) above the thrust fault—for example, along the Going-to-the-Sun Highway. The Lewis thrust moved highly compacted "cooked" rocks on top of weakly compacted, "un-cooked" rocks.

Fossils, radiometric age dates, burial depth and small-scale structures all document this great structure. Cores from many oil wells, drilled through the Lewis thrust, have shown its extent and three-dimensional shape.

With his claims that volcanoes were caused by burning buried coal beds and that glaciers never covered Canada and the northern US, Price was dismissed by scientists as a religious fanatic lacking scientific training, both in his time and ours.

Thus it is amazing to see how many of his unscientific ideas continue (usually without giving him credit) to serve as the basis of contemporary creationist attempts to compress 4.6 billion years into the few thousand years

creationists claim are allotted by *Genesis*. It is encouraging to see that at least two younger creationists, Steven Austin of the Institute for Creation Research, and Kurt Wise of Bryan College, Dayton, TN, have recognized the absurdity of Price's widely-used claims concerning Glacier Park. They acknowledge publicly that the Lewis thrust does indeed exist.

This is not a scientific dispute. It might be noted that Chief Mountain is now closed to tourists because of their interference with Blackfeet religious ceremonies there. Why doesn't the widespread demand for "equal time" include equal time for Blackfeet and other Native American creation accounts? ❖

❖
"glaciers
never
covered
Canada
and the
northern
US," said
Price

Privatize All Massachusetts Schools?

John Cole

GOP Governor William Weld has floated a startling proposal. An October 4th AP story says he is considering turning over the operation of Massachusetts schools—or at least the large state portion of funding—to the private Edison Project, a for-profit company set up by Chris Whittle in 1991 to run high-tech schools like a national private franchise network. (No schools have been set up anywhere, so far.)

Weld, widely considered a presidential hopeful, has been an adamant advocate of privatization of public services. The state Education Commissioner Robert Antonucci said that Weld had decided to endorse the Edison plan in late September.

Some Edison plans sound attractive to many educators: Classrooms would be open 12 hours daily, with instruction from 8 A.M. to 4 P.M.; summer vacations of six weeks instead of the typical 9-12 weeks; students would enter at age 3 rather than 5 or 6. However, aside from philosophical objections to abandoning public schools to make students into commodities, critics point to the fact that what remained of public schools would be left with all of the students with problems and virtually no budgets. Many critics claim that public schools need to be rebuilt from scratch but are nervous about doing it for profit.

Whittle already operates "Channel One," the controversial daily television news show seen by 8 million students—in about 17% of the country's wealthiest high schools but 38% of poor and/or

minority schools (UPI 10/17/1993). Each 10 minute show includes 2 minutes of commercials grossing about \$630,000 per day for Whittle Communications; schools get the equipment free but have to guarantee that students watch the show each day. Channel One has been barred from all New York schools and many in California because of the captive commercial audience aspect. (In addition, some research shows that students learn much from the program about advertised products but do not seem to learn much more than control groups about current events, as a recent *60 Minutes* broadcast suggested.) The *Wall Street Journal* has referred to the Edison Project as "an expanded outlet" for advertisers (*Daily Hampshire Gazette* 10/16/1993). ❖

Resources

Books

	LIST	MEMBERS		LIST	MEMBERS
Berra, <i>Evolution and the Myth of Creationism</i>	8.95	7.00	McGowan, <i>In the Beginning... A Scientist Shows Why the Creationists Are Wrong</i>	18.95	15.25
Bowler, <i>The Non-Darwinian Revolution</i>	12.95	10.35	McIver, <i>Anti-Evolution, An Annotated Bibliography</i>	15.95	12.75
Cartmill, <i>A View to a Death in the Morning</i>	*29.95	23.95	McKown, <i>The Mythmaker's Magic</i>	*23.95	19.15
Clark, <i>Evolution and Cultural Literacy</i>	7.00	5.60	Montagu, <i>Science and Creationism</i>	16.95	13.55
Dalrymple, <i>The Age of the Earth</i>	*55.00	44.00	<u>NEW</u> Moore, <i>Science as a Way of Knowing: The Foundations of Modern Biology</i>	29.95	23.95
Dawkins, <i>The Blind Watchmaker</i>	10.95	8.75	Newell, <i>Creation and Evolution: Myth or Reality?</i>	12.95	10.35
<u>NEW</u> Deford, <i>A Reparation: Universal Gravitation a Universal Fake</i>	6.00	4.80	Numbers, <i>The Creationists</i>	*27.00	21.50
Diamond, <i>The Third Chimpanzee</i>	12.00	9.50	Raup, <i>Extinction: Bad Genes or Bad Luck?</i>	*19.95	15.95
Dietz & Holden, <i>Creation/Evolution Satiricon</i>	12.95	10.25	Robinson & Tiger, eds. <i>Man and Beast Revisited</i>	16.95	13.55
Desmond & Moore, <i>Darwin. The Life of a Tormented Evolutionist</i>	*34.00	27.25	Ruse, <i>But is it Science?</i>	*28.75	23.25
Ecker, <i>Evolutionary Tales</i>	10.00	8.00	Sagan & Druyan, <i>Shadows of Forgotten Ancestors</i>	*23.00	18.00
Eldredge, <i>The Miner's Canary</i>	20.00	16.00	Strahler, <i>Science and Earth History, the Evolution/Creation Controversy</i>	*47.95	38.55
Eve and Harrold, <i>The Creationist Movement in Modern America</i>	11.95	9.55	Strahler, <i>Understanding Science</i>	*25.95	20.75
Godfrey, <i>Scientists Confront Creationism</i>	10.95	9.50	Van Till, Young, & Menninga, <i>Science Held Hostage</i>	10.99	8.75
Gould, <i>Bully for Brontosaurus</i>	10.95	8.75	Williams, <i>Natural Selection</i>	24.95	19.90
Gould, <i>Ever Since Darwin; The Panda's Thumb</i> (2 bks)	9.95	7.99	Wilson, <i>The Diversity of Life</i>	*29.95	23.95
Gould, <i>Hen's Teeth and Horse's Toes</i>	6.95	5.55			
Gould, <i>Flamingo's Smile; Wonderful Life</i> (2 bks)	10.95	8.75			
Harrold & Eve, <i>Cult Archaeology and Creationism</i>	*24.95	19.95			
Howells, <i>Getting Here</i>	19.95	15.95			
Hughes, <i>Reviews of Creationist Books</i>	10.00	8.00			
Larson, <i>Trial and Error</i>	9.95	7.95			
Lewin, <i>In the Age of Mankind</i>	19.95	15.95			
Lewin, <i>The Thread of Life</i>	19.95	15.95			
Maynard Smith, <i>Did Darwin Get it Right?</i>	*25.00	20.00			
Mayr, <i>One Long Argument: Charles Darwin and the Genesis of Evolutionary Thought</i>	10.95	8.75			
McCollister, ed., <i>Voices for Evolution</i>	10.00	8.00			
McGowan, <i>Dinosaurs, Spitfires and Sea Dragons</i>	14.95	12.00			

Kids Books

Barker, <i>Maybe Yes, Maybe No</i>	11.95	9.55
<u>NEW</u> Cole, <i>Evolution</i>	4.50	3.60
Peters, <i>From the Beginning, The Story of Human Evolution</i>	14.95	11.95
Stein, <i>The Evolution Book</i>	12.95	10.35
Stein, <i>The Science Book</i>	9.95	7.95

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see page 14

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for
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Resources

NEW BOOKS

To order see
pp. 12-13

Science as a Way of Knowing, the Foundations of Modern Biology

John A. Moore

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—Bruce Alberts

A Reparation: Universal Gravitation a Universal Fake

C.S. DeFord

A rare reprint of a famous flat-earth book of the early 20th century! The parallels between the reasoning here and in Biblical-literalist creationism will amaze you.

HOLIDAY GIFTS FOR KIDS & GRANDKIDS

Evolution

Joanna Cole

At last! A book to read aloud to very young children that tells the story of evolution. Beginning readers can try for themselves.

From the Beginning, The Story of Human Evolution

David Peters

Lavishly illustrated book suitable for middle school through junior high. Good diagrams and clearly written.

The Evolution Book

Sarah Stein

The whole picture, for middle school through junior high level, with lots of hands-on activities.

Science Is . . .

Susan V. Bosak

An eight-year research project involving educators, scientists, parents and children throughout North America and a review of more than 1000 science activity/resource books has resulted in a 515-page science resource titled *Science Is . . .*

The book has received the support of the National Science Teachers Association and the American Association for the Advancement of Science. It is designed to enrich elementary/intermediate programs; high school teachers also find it a good source of attention-getting, thought-provoking activities that lead into more complex material. Universities have found it to be required reading for student

teachers in courses such as science teaching methods or in teaching practica.

The hundreds of activities have been tested and require only readily-available, inexpensive materials. In addition to hands-on experiments and projects, the book includes puzzles, games, plays and stories. Activities range from "Quickies" to projects which can be spread over days or weeks. The approach to science is holistic and comprehensive. There are ten broad subject areas: Discovering Science, Matter and Energy, Humans, The Environment, Rocks, Plants, Living Creatures, Weather, The Heavens, and Applying Science. There is a "Using This Book" section and a directory of "Other Resources."

Science Is . . . costs \$29.95 from the NSTA (1-800-722-NSTA) or Scholastic (1-800-325-6149).

[Eds.' note—Ms. Bosak is associated with *The Communication Project*, Markham, Ontario, Canada; her comments were sent us by the *Science Is... Project*.] ♦

New Kentucky Newsletter

The Kentucky Paleontology Society now publishes a *KPS Newsletter*, available to Kentuckians or non-Kentuckians for \$10/yr. For subscriptions or more information, contact KPS, 365 Cromwell Way, Lexington, KY 40503 (606-223-8884).

Resources

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

Ager, Derek. 1993. *The New Catastrophism; The Importance of the Rare Event in Geological History*. NY: Cambridge University Press. xx+231 pp. \$34.95. A significant work on a topic often misused by anti-evolutionists. Technical.

Bartel, David P., and Jack W. Szostak. 1993. Isolation of New Ribozymes from a Large Pool of Random Sequences. *Science* 261:1411-1418 (10 Sept.). A landmark paper tests the idea of an early "RNA world." Randomly-occurring self-replicating RNA molecules mutated and evolved in the lab.

Bowring, Samuel A., et al. 1993. Calibrating Rates of Early Cambrian Evolution. *Science* 261:1293-1298 (3 Sept.). The Cambrian explosion of new species proves to have been even more rapid than once believed.

Brown, Walter T. 1992. *In the Beginning*. Noted in *B-S News*. 122 pp pb, \$9.00. "137 categories of evidence for creation" from creationist viewpoint.

Dawkins, R. 1993. Meet My Cousin, the Chimpanzee. *New Scientist* 138(1876):36-38 (5 June). Is the "gap" between humans and chimps arbitrary?

Flannery, Maura C. 1993. Evolution at the center. *American Biology Teacher* 55(6):372-375. Reflections on *The Origin*, Huxley's *Darwiniana*, and 20th century accounts of evolution.

Understandable introduction to evolution theory.

Forrest, Stephanie. 1993. Genetic algorithms: principles of natural selection applied to computation. *Science* 261:872-878 (Aug. 13, 1993). Just what it sounds like. Using computer models of natural selection to solve problems in evolution and other areas. Neat article.

Foster, Kenneth R., D.E. Bernstein and P.W. Huber. 1993. Science and the Toxic Tort. *Science* 261:1509-10, 1614 (17 Sept.). A "Policy Forum" discussion of the role of science in the courtroom and the nature of "expert" testimony.

Goodenough, Ward H. 1993. Evolution of the human capacity for beliefs. *Zygon* 28(1):5-28. Development of human language added to other primate capabilities leads to evolution of belief.

Harpending, Henry C., S.T. Sherry, A.R. Rogers, and Mark Stoneking. 1993. The Genetic Structure of Ancient Human Populations. *Current Anthropology* 34(4):483-496. Modifies the "Eve" hypothesis; at best, they

say, there were multiple migrations out of Africa, and some genetic changes developed elsewhere, too.

Horgan, J. 1993. Off to an Early Start. *Scientific American* 269(2):24 (August). Recent evidence for the early origin of cyanobacteria.

Johanson, Donald C., and Kevin O'Farrell. 1990. *Journey from the Dawn: Life with the World's First Family*. NY: Villard Books. 125 pp, virtually all in color, \$22.50. For middle school age kids.

Johnson, Phillip. 1993. Creator or Blind Watchmaker? *First Things: A Monthly Journal of Religion and Public Life* 29: 8-14 (January). A major exposition of influential lawyer Johnson's argument against evolution.

Kauffman, S.A. 1993. *The Origins of Order: Self-Organization and Selection in Evolution*. Oxford: Oxford University Press. NP. Order out of chaos, naturally.

McCollister, Betty. 1993. On the Other Hand: The Terrible Texts.

National Biological Survey

The National Biological Survey, a new agency of the US Department of the Interior, should lead a program that pulls together public and private organizations to gather environmental information. Its aim is to avoid costly confrontations over the nation's plant and animal life, according to a report released in October 1993 by the National Research Council. The National Partnership for Bio-

logical Survey, would help link federal and state agencies, museums, academic institutions, and other non-governmental organizations and coordinate their research efforts. The report, *A Biological Survey for the Nation*, is available for \$26 + \$4 shipping from the National Academy Press, NAS, 2101 Constitution Avenue, NW, Washington, DC 20418.

Resources

❖
Yee—
refuting a
major
creationist
“no
transitional
fossils”
claim
❖

The Humanist, Nov-Dec, pp. 40-41. Survey of textbook criticisms by NCSE, *Textbook Letter*, Bernstein-Tyson, et al.

McMullin, Eman. 1993. Evolution and special creation. *Zygon* 28(3):299-336. “Special creation ought to be regarded as, if anything, less rather than more likely than its evolutionary alternative.”

Mitchison, Avrion. 1993. Will We Survive? *Scientific American* 269(3):136-144 (September). Evolving and emerging diseases adapt to human demographic changes.

Nash, J. Madeleine. 1993. How Did Life Begin? *Time* 142(15):68-74 (Cover story, 11 October). Ambitiously researched survey article, sure to incense anti-evolutionists.

Nelson, Paul. 1993. Transcript of Michael Ruse’s comments during the 1993 AAAS Meeting, with addendum by Phillip E. Johnson. **Available from NCSE for \$1.00 + SASE.**

Osterbrock, D.E., J.A. Quinn and R.S. Bashear. 1993. Edwin Hubble and the Expanding Universe. *Scientific American* 269(1): 84-89 (July).

Paabo, Svante. 1993. Ancient DNA. *Scientific American* 369(5):86-92 (November). Reconstructed fragments from thousands and millions of years ago—how they do it and what they learn (no dinosaur clones just yet!).

Rennie, John. 1993. Insects are Forever. *Scientific American* 269(5): 18, 20 (Nov.). Staying power, not adaptation to flowers, made for insect diversity, since

so many evolved before flowering plants.

Rydell, Robert W. 1993. Review of *A View to a Death in the Morning*, by Matt Cartmill. *Science* 261:1609-1610 (17 Sept.). Critique of the “naturalness” of hunting by humans, past and present. **[Cartmill bk available from NCSE at discount—see centerfold]**

Schrag, Peter. 1993. Bailing Out of Public Education. *The Nation* 4 Oct, pp. 351-354. The California voucher plan.

Somit, Albert, and S.A. Peterson, eds. 1992. *The Punctuated Equilibrium Debate in the Natural and Social Sciences*. Ithaca: Cornell University Press. 325 pp, NP. Fairly technical.

Vickers-Rich, P., and T.H. Rich. 1993. Australia’s Polar Dinosaurs. *Scientific American* 269(1): 50-55 (July). More evidence for warm bloodedness.

Ward, P.D. 1992. *On Methuselah’s Trail: Living Fossils and the Great Extinctions*. San Francisco: W.F. Freeman. xii+212 pp, NP. “Well-thought-out, informative and a good taste of field work,” says reviewer Frank Sonleitner.

Yee, Michael S.Y. 1993. The Origin of the Turtle Body Plan: Bridging a Famous Morphological Gap. *Science* 261:1716-1720 (24 Sept.). Parelasaurs—primitive reptiles—shown to be closest kin of turtles. Important research refutes another creationist “missing link” argument. ❖

Science Education

The Science, Technology, and Society Project at Arizona State University has published a 2-Volume *Handbook of Science, Technology, and Society*. Vol. I is “A Theoretical and Conceptual Overview of Science, Technology and Science Education,” with models and strategies for classroom use; Vol. II addresses hands-on science education for the middle grades, from biodiversity to water cycles. \$10 per volume (no C.O.D.s or P.O.s) from STS Project, ASU, FEE0911, ASU, Tempe, AZ 85287-0911.

Science Is Elementary is a quarterly series of booklets with hands-on activities, book reviews, and resource listings for elementary teachers. \$22

per year; contact Mary Francis Walsh, Museum Institute for Teaching Science, 79 Milk Street, Suite 210, Boston, MA 02109-3903 (617-695-9771).

The New Careers Directory: Internships and Professional Opportunities in Technology and Social Change, 4th edition. \$18+\$3 shipping from Student Pugwash USA, 1638 R Street, NW, Suite 32. Washington, DC 20009 (202-328-6555).

Teacher’s Guide to World Resources 1992-93. 150pp of secondary school coursework from WRI Publications, P.O. Box 4852, Hampden Station, Baltimore, MD 21211 (800-822-0504 for MasterCard orders). \$5.95+\$3 shipping. ❖

Keeping Tabs

Jurassic Park on the Ark

Kent Harker

Jurassic Park and Barney have the country awash in dinosaurs, and the creationists are apoplectic about it. Before the film and adorable stuffed doll, it was easier to ignore the troublesome beasts and the problems they cause. However, we can imagine that the ICR is doing a land-office business with its dinosaur books and tapes.

It amazes me that I can still be amazed about some of the things I hear from the creationist camp. Since I spend a fair amount of time in my car, I sometimes listen to the Southwest Radio Bible Church because their broadcasts often feature prominent creationists. Today's program (August 6) was a special treat featuring the Rev. Carl Baugh (one of the "experts" featured in the recent CBS Noah's Ark fiasco).

For those interested in Baugh's academic background, please see *Reports* 9(6):18. Baugh says he has a Ph.D. in paleontology (among many other fields). He is glib with technical terms, usually pronouncing them properly, so he may sound credible, but it all goes down the drain when he parleys his dinosaur spiel. Baugh's explanations really lightened a hard afternoon drive for me.

He says *Job* 40:15, "Behold now behemoth, which I made with thee; he eateth grass like an ox" refers to a dinosaur [See *C/E* 15, 17, etc. for detailed analyses of Baugh's claims]. This means they lived during Job's day, a mere 99.985% time error. The host interviewing Baugh said, somewhat shrinkingly, "Well,

that means they were on the Ark." Baugh confirmed that, indeed, they were there in all their "kinds." The conversation quickly moved on to other areas without discussing dinosaurs in wooden cages.

Baugh went on to explain that sightings of "Nessie" and her cousins in Lake Tahoe and the Great Lakes are really glimpses of dinosaurs. What's more, he said that some of the strange lizards recently found in Australia are really mini-dinosaurs, "shrunk" by post-Flood conditions! Baugh said, "If we had the funding to build a hyperbolic enclosure to duplicate the pre-Flood environment we are confident those lizards would return to their original size." He apparently forgot that he had just finished a sentence about giant, unshrunk Nessie. He speculates that the "vapor canopy" completely shielded the Earth from UV radiation and exerted double our current atmospheric pressure, making the Earth a lush, tropical garden in which everything was jumbo sized. [*He used to claim the atmosphere was ozone instead of regular oxygen, too—Ed.*]

But there's more.

Baugh then announced that we could see God's grand purpose in creating these giant vegetarians: they were pruning machines. It seems conditions were so fertile that Adam "... would not be able to show Eve the Moon," so thick would be the giant vegetation without the work of munching dinosaur harvesters!

It seems to me that there would be more problems living with dinosaurs than seeing the moon, so I tried to call in a couple of naive questions, like how would the

Moon be visible through the vapor canopy in the first place? Since there would be no more lush vegetation after the Flood and no canopy after it fell to cause the Flood and the dinosaurs thus seemingly out of a job, why overburden the Ark only to kill them off (or shrink them?) a short time later? I didn't get to ask.

Bad Book Alert

Joan B. Melvin

I am returning the book *Biology Teacher's Survival Guide* by Michael F. Fleming to Education/CARE, Paramount Communication Company of Des Moines. It is totally unsuitable for biology teachers because on page 123 it says, "... there are two main theories about life's origins, evolutionism and creationism..." Such statements as appear in this section have no place in any responsible book on biology. Evolution is the *only* theory that can explain so many of the details of diversity and unity of life so well. Creationism may have a place in a religion course, but it certainly does not belong in a science course. In the sense the term is used in science, creationism is NOT a theory, and it is not science. I am concerned because this book may be used as a guide by new teachers and influence them to give erroneous information to their students. This section destroys any merits the rest of the book may have.

This is an edited summary of a letter to the publisher sent to NCSE by Dr. Melvin of the Winsor School, Boston, MA.

❖
Flash—
Dinosaurs
created so
Adam could
show Eve
the moon
❖

Keeping Tabs

Changes at Bible-Science Association

John Cole

The *Bible-Science News* may be in for some radical changes. Rev. Paul A. Bartz, long-time editor and former B-SA executive director, has been replaced as editor by Jan Resser. Bartz, once a protege of B-SA cofounder Rev. Walter Lang, remained with the organization when Lang departed. Creationist-watchers have seen the B-SA veer heavily into general "religious right" issues recently, seeming to downplay "scientific" creationism. Gregory Hull had succeeded Bartz as executive director in an earlier shake-up. Bartz has a half-page devotional item in this latest issue.

A change in editorial direction seems to be in the offing. Paul Nelson is now "Contributing Editor," as of Vol. 31:7, just received (mid-Oct). Nelson, a Ph.D. student in philosophy at the University of Chicago, is known for intellectual integrity (and training). His long article in *Origins Research* 15(1):1 ff., "The Whole Question of Metaphysics," was a largely critical review of the NCSE-sponsored AAAS symposium in February. Participants in that session whom I have interviewed did not agree with much of his analysis, I should note, but they "disagreed," thought "he misunderstood," etc. rather than accusing him of dishonesty.

Nelson provides the front page article for this *B-SN*: "Language, Natural Selection and Creation." (His conclusions are wrong but neither laughable nor stupid!)

B-SN 31(7) has a tone which seems less sensational and/or hysterical—no references to geocentrism, no hints that opponents are Satanists, no endorsements of weird claims about Noah's Ark or Paluxy footprints or geocentrism.

If this first issue is an example, B-SA is adopting the new mainstream creationist approach of criticizing evolution rather than advancing easily-disproved or derided claims. This issue reads a bit more like a *Students for Origins Research* publication rather than a creationist *National Enquirer*. SOR has long prided itself on a sober, scholarly style and a certain openness to disagreement.

B-SA commitment to their foregone conclusion has not wavered, but the presentation is no longer laughable. For example, Richard

Lewontin's critique of ideological belief in natural selection, whatever the evidence, no matter what, is quoted intelligently without asserting that Lewontin is, therefore, endorsing creationism! (Creationists are supposed to think it, perhaps, but the article does not spell it out or claim that Lewontin has joined their camp.) Lewontin, of course, was arguing (to oversimplify) that evolution did occur and works as a science and should not be an "ism."

If B-SAers really opt for intelligent argument, they strengthen their position; their long-time fringiness was an easy target for critics. Ironically, perhaps, the ICR seems to be leaning towards greater religious right sociopolitical and evangelical stances via spokesman Ken Ham.

Christian Educators Seek Route to Teaching Creationism

Eugenie C. Scott

The Christian Educators Association International held its 24th annual meeting in Colorado Springs, CO, in July of 1993. They were told, according to an article in the Colorado Springs *Gazette-Telegraph*, that religious subjects could be brought up in class by "planting" questions from Christian students so that Biblical issues could be discussed. Similarly, religious words could be listed for spelling tests, and students could be given religious topics for term papers, thus encouraging discussion of religious topics.

Creationism, according to CEAI, could be given equal time with evolution "by relying on the very case law that's seen as establishing the separation of church and state" (*Gazette-Telegraph*, July 27, 1993, p. B1). As discussed frequently in *NCSE Reports*, the Supreme Court *Edwards v Aguillard* decision provides loopholes now being used by antievolutionists to promote their views (*Reports* 9(2):14-15; 13(2):1). The loopholes appear to give free rein to such neo-creationist concepts as "intelligent design theory," "abrupt appearance theory," and "evidence against evolution."

❖
B-SA and
ICR—
trading
places?
❖

NCSE News

NCSE Symposium Scheduled at AAAS 1994

Eugenie C. Scott

NCSE's symposium proposal to the American Association for the Advancement of Science will be on the AAAS 1994 program. (Only 50% submitted proposals are accepted, and we've been successful two years running.) Our session, *Anti-Science/Anti-Evolution*, will take place Sunday, February 20, 1994, 2:00-5:00 at the Parc 55 Hotel in San Francisco, CA.

Speakers and their topics will be Kevin Padian (*The Triumph of the Creationist Method*), Francisco Ayala (*Evolution and the Bible: What is the Conflict?*), Bernard Ortiz de Montellano (*Evolution and Multiculturalism*), Norman Levitt (*Bewilderment and Hostility in the Postmodern Attitude Toward Science*), and Eugenie C. Scott (*Discussant*).

We hope many NCSE members from around the country can attend. San Francisco Bay area members should contact me if they can help organize a get-together for NCSE members. We'll

let you know what develops in the next issue.

The symposium abstract follows:

Science as scientists see it is not at all the same phenomenon as science seen through the eyes of many of our fellow citizens. Evolution, a theory within science, in particular exemplifies the gap between the vision of scientists and the vision of the nonscientist citizen.

This session will look at science and evolution as seen through others' eyes: the postmodernist "academic left," the "scientific" creationists, and certain "multicultural" educationists. It is the contention of the speakers that these eyes look with both myopia and astigmatism: critics of science and evolution criticize from a serious lack of understanding of how science works, as well as from a lack of some of the basic understandings of the natural world that science has brought us. Further, modern science and especially evolution are viewed as dangerous, even menacing, by some of these recent critics. For philosophical reasons or to

achieve social and political goals, these critics distort both the nature of science as an intellectual enterprise, and evolution as a scientific principle.

There are practical consequences of these fundamental misunderstandings, as this particular set of critics influences both the K-12 education system and higher education. Their ideas are expressed in textbooks and school curricula, and even in scholarly journals. The next generation of scientists is being exposed to these ideas, but more importantly, so to is the next generation of voting, and technology-using citizens. As science is largely dependent upon society for its support, it behooves scientists to take these challenges seriously, and strive first to understand them, and then to counter them with accurate information on the nature of science and evolution. ❖

February
20, 1994
2-5 PM

Manny Sillman Honored

John Cole

Emmanuel Sillman, retired physics professor and Pennsylvania Committee of Correspondence Liaison, was voted a "Friend of Darwin Award" in 1993, saluting his tireless contributions to evolution education. He has worked for years in the Pittsburgh area, statewide and on

the national stage to uphold evolution education at both the pre-college and college levels. From working with school committees and students to debating ICR's Duane Gish to hosting the small "evolutionist camp" at periodic Pittsburgh creationist conferences, Sillman has earned a debt of gratitude from educators nationwide. ❖

NCSE Member Silver Honored

NCSE member and church-state separation activist Queen Silver will be honored at the 1993 Humanist Association of Los Angeles annual Awards Banquet, in November. Silver has long advocated maintaining the integrity of science by keeping creationism out of the science classroom, and in California, has testified before the state Department of Education in support of good textbooks. Congratulations!

Board Members Report

In recent months NCSE Board Members have tracked dinosaurs, explored evolution history, hunted primate fossils, worked on animal lab policies, bailed hay, advanced environmental research, helped introduce inner city students to science, consulted with museums, written research articles and founded publications.

President Jack Friedman is teaching in New York at Nassau Community College, specializing in science education for inner city and minority students.

Laurie Godfrey did field research on lemur paleontology in Madagascar this summer, excavating fossils deep in guano-filled limestone caves. She continues to publish technical papers about primate evolution and anatomy and has recently published reviews of several books such as Numbers' *The Creationists* and a study of Darwinism and the press. Her pioneering paper (with senior author Daniel Povinelli) on the nature of primate cognition, "The Chimpanzees Mind: How Noble in Reason? How Absent of Ethics?" has recently been published as a chapter in *Evolutionary Ethics*, ed. by Matthew and Doris Nitecki (SUNY Press, Albany). How unique is human cognition—the understandings of consequences, for example, or the ability to attribute motives or plans to others?

Kevin Padian spent the summer doing research on dinosaurs at several museums and researching a Berkeley library manuscript by Robert Owen via exploration of Library of Congress resources. His articles on "Science in Boxes" (*Textbook Letter* and a related Summer *Skeptical Inquirer* article)

criticized classroom use of "hands-on" science units without integrating them, leaving science to look like a series of unrelated little boxes. Unpopular or touchy units such as evolution can simply be skipped, he notes. He recommended greater interest and involvement on the part of scientists and an improved crop of textbook writers. He continued to work with the California Department of Education on science curriculum and textbook policies.

Padian gave two papers and two poster sessions at the October annual meeting of the Society of Vertebrate Paleontologists. In November he will give several talks at the North Carolina Science Teachers Association, and he will run a "short course" on dinosaurs at the March national meeting of the NSTA.

Mac West has been working as a museum consultant in the US and other countries via his firm, RMW Science Action (3811 Jenifer Street, NW, Washington, DC 20015; tel:202-362-5823. In June 1993, he launched a new publication with Dr. Robert L. Russell, *The*

Informal Science Review. Designed to be a new source for useful, serious and fun informal science education—that is, education outside the classroom proper. Zoos, museums, nature centers, libraries, clubs, and community organizations are the target audience, along with the communications media. The 12-page bimonthly is \$45 per year from The ISR, P.O. Box 42328, Washington, DC 20015.

John Cole will speak at a Smithsonian-sponsored session at the November American Anthropological Association annual meeting. He continues to work on environmental issues at the Massachusetts Water Resources Research Center.

Ronnie Hastings, a Waxahachie High School teacher, has been involved with the imperilled Superconducting Supercollider project headquartered at Waxahachie and working on the nearby family farm/ranch over the summer. (As we go to press, the Supercollider project has apparently been killed by a joint Senate-House committee, except for closing-down costs.) ♦

Report and Creation/Evolution Now Printed on Recycled Paper

We are happy to report that beginning with issue 13(2) of *NCSE Reports*, NCSE publications are being printed on recycled paper. The stock used for the newsletter is composed of 100% recycled paper, including 25% post-consumer waste, as will be the stock we use for the next issue of *Creation/Evolution*.

NCSE also uses recycled stationery and envelopes, and when possible, re-uses clean shipping materials. Our office also participates in the City of Berkeley's recycling program, recycling all its paper and cardboard. In Massachusetts, our editor recycles all paper he uses via his local recycling system, and he re-uses blank sides of ms. pages for draft copies. ♦

NCSE News

Changes at NCSE Berkeley Office

NCSE welcomes new office manager Erik Wheaton, who replaced Madeleine Clark in October. Madeleine is on maternity leave after the birth of her new daughter on September 30.

Erik comes to us after several years of nonprofit experience as a manager and supervisor at University of California-San Francisco Department of Psychiatry AIDS Health Project. He joins part-time staffers Teresa Kim (general office, book-sales, resource center) and bookkeeper Tully Weberg.

Madeleine Clark will be back part time as project director for the Prepublication Review Project after a few months. Other project directors at NCSE include Anne Hayes, director of the Human Evolution Education Network (HEEN), and Molleen Matsumura, director of the Network/Committee of Correspondence Project. These and similar projects are designed to integrate and coordinate volunteer efforts, often with grant support for specific projects. ❖

NCSE Member California's Outstanding Biology Teacher

Eugenie C. Scott

Thomas Atkins, biology teacher in Fresno, CA, has been selected by the National Association of Biology Teachers as California's Outstanding Biology Teacher for 1993. Atkins, an NCSE member of long standing, has taught biology with great enthusiasm for 28 years, including costumed stints as

Charles Darwin or Gregor Mendel. Several years ago he developed a computer simulation game of evolution called, "Bebledwark World" (write Best Biological Software, 101 Wood Duck Drive, Sanger, CA 93657; 209-787-2340).

Congratulations, Tom! NABT made a good choice! ❖

NCSE on NPR

Genie Scott, NCSE Executive Director, appeared October 1, 1993 on *Science Friday*, a nationwide two-hour interview and audience call-in program. (The show is daily; Fridays are devoted to science). The Host, Ira Flatow, has been a National Public Radio sci-

ence reporter for some time, and he is host of the television science show for kids, *Newton's Apple*.

Appearing on the show along with Dr. Scott was Berkeley law professor Phillip Johnson. Ira Flatow quickly steered the discussion away from "What is the scientific

evidence for evolution or against it?" towards Johnson's favorite topic—his argument that evolution is a "materialistic philosophy" and therefore needs to be lambasted. During and after the show, NCSE received dozens of calls, virtually all of which were supportive and asking for further information. ❖

NCSE's 800 "Hotline"

Eugenie C. Scott

Now NCSE has an 800 number that people needing information on the creation/evolution controversy can call.

The NCSE "Hotline" is

1-800-290-6006

As word gets out, the number is proving useful. After I appeared on NPR's *Talk of the Nation* show, *Science Friday* on October 1, NCSE received dozens of calls from people grateful that such an organization existed—the volume of calls taxed our ability to respond, in fact, but we coped!

The 800 number should make it easier for teachers and parents to contact us for help, and it also makes it easier for NCSE members to renew their memberships and purchase books and other materials conveniently. (It is not free, though—your "self-subsidized" calls to 510-526-1674 are also appreciated.)

❖
Remember—
Creation/
Evolution
back issues
are available
with
answers to
most
creationist
claims!
❖

Letters

Johnson on Scott & Ruse

I have just received the Summer 1993 issue of *NCSE Reports*. This time, (NCSE Executive Director] Eugene Scott herself tries to clean up the mess left behind by Michael Ruse at the AAAS Meeting in Boston. (Arthur Shapiro's effort in the last issue evidently did not suffice.) What particularly delights me is the logic of her conclusion: Michael Ruse predicted that a slick lawyer like Phillip Johnson might quote his remarks out of context. A complete transcript of Ruse's talk has been widely distributed. This proves Michael was right!

I can't imagine what the NCSE directors make of all this. Here they conduct a program before a friendly audience at the AAAS Meeting with nobody permitted to defend the persons under attack, and manage to embarrass themselves so badly that eight months later they are still trying to explain it away. What are they going to do when they have to play against another team?

I note that NCSE is selling the Paul Nelson transcript of Ruse's remarks (with addendum by Phillip E. Johnson) for \$1.00. I hope they sell a lot of copies.

Phillip E. Johnson
Boalt Hall College of Law
Univ. of CA, Berkeley

Ed—Since two or more creationist organizations took up the "cause" this summer, including out of context quotations, we thought additional comment was reasonable.

"Popperism" and Science

Arthur M. Shapiro (*Reports* 13(1)) goes on at length criticizing "Popperism." He says it is "notorious" in fields which have "reputations as soft, fuzzy, and ill-defined." "Popper-worship . . . (allows adherents) to be 'soft' while claiming to be 'hard' . . ." I'm puzzled by this, because my understanding of Popper has led me to just the opposite.

I am a self-educated person who has come upon Sir Karl Popper's writings as a breath of fresh air in the "what is science" debate, where "new paradigms" are pitted against "Western (white, male) science." I have found his concepts very useful in debating "alternative" medicine and creationism. To the best of my understanding Popper is the principal proponent of the twentieth century concept of the scientific method. Popper taught us the relative nature of scientific research, that it can lead to ever-more-rigorously tested and therefore ever-more-useful theories, but never to an absolute "truth."

I've heard that Popper has been much misunderstood in academia, and it may be second-hand misconstructions of his philosophy which Shapiro is, rightly, criticizing. Many may know Popper only as an opponent of Marxism and may revile him for that without actually reading his work. Karl Popper is alive today, still writing, and should not be put down without a genuine argument. I challenge Shapiro to be more

specific about which of Popper's writings he disagrees.

Dan Dugan
San Francisco, CA

Arthur Shapiro replies:

I agree that Popper's work has been very useful in helping to define criteria to delimit science from non-science, which is precisely why it has been so popular. The trouble is that things are more complicated than that.

Almost as soon as Popper's ideas were codified, they came into conflict with the "sociological" views of Thomas Kuhn and the virtual "anarchism" of Paul Feyerabend. Imre Lakatos greatly refined Popper's naive falsification in a paper in *Criticism and the Growth of Knowledge* edited by Lakatos and Alan Musgrave (Cambridge 1970). Lakatos' more sophisticated approach corresponded more closely to what scientists actually do but in the process lost the simplicity and elegance of Popper's position.

There have been many critics of Popper. Some have been motivated by Marxism; certainly I am not one of those. Most critics perceive his position as too idealistic, describing how science *should* work, not how it actually functions. The choice is not between Sir Karl and anarchy and UFOs. I recommend Larry Laudan's *Science and Relativism* (Univ. of Chicago 1990) as a good summary. It's full of "in jokes," though, so you may need a philosopher on call when you read it.

Anti-religious Prejudice?

I was disturbed by an article that appeared in the *Spring Reports* and wish to make my displeasure known. It is a symptom of a larger problem which I hope you will address as editor.

Having recently graduated from Duke U (Civil Engineering '92), I like to think of myself as fairly educated in basic science. As an evangelical Christian I am also well versed in the theology, history and doctrine of my faith. I therefore find myself caught between these dynamics in my search for truth about our origins. I have turned to your publications as sources to aid in my understanding of the issues.

Since subscribing I have felt an underlying tone of hostility towards all things Christian. Two recent events have solidified this perception. First, you sold my name to the American Humanist Association, which stated in their appeal for money, "Humanists reject all forms of belief in the supernatural. . . ." That you believe all your readers are of this ilk reinforces the idea of your hostility to Christianity.

Secondly, in one article (p. 15), I find part of the piece exhorting me to fight anti-abortionists, tuition tax credits, and school prayer. To fight these fights undermines your whole legitimacy. I turned to you for scientific understanding of the front-line events and issues only to find you standing not on the foundation of scientific truth but on the pedestal of bias and anti-Christianity. Keep

Letters

your focus on creationism, for when it becomes Christianity you have not only lost your authority, but me as a subscriber.

Peter Barton
Groveland, MA

Ed: Like most nonprofits, NCSE occasionally sells or lends its mailing list to other nonprofit organizations. We are sorry if one of them offended you, but the sentiments you note were AHA's, not ours. On the membership form and on the back of Reports, we have a check-off box for anyone who

does not want his or her name shared. (I've forwarded your objection to the publisher.) As to our "anti-Christianity," I'd note that I also get complaints about my bias towards religion! NCSE has been widely applauded for being religiously and politically neutral and takes no position on abortion,

for example, but we do report on "religious right" efforts to take over public schools and institutions when their package includes creationism, and we see church-state separation as an important defense of religious freedom and scientific integrity. ❖

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