Officers and Directors

Kevin Padian, President
Jack B. Friedman. Past President
Robert M. West, Sec.. Treas.
Fred L. Beyer, Director
Laurie Godfrey, Director
Duane H. Jeffery, Director
Andrew J. Petto, Director
Frank J. Sonleitner, Director
Elizabeth K. Stage. Director
Eugenic C. Scott, Exec. Director

Supporters

Bruce Alberts, NAS Francisco J. Ayala, UC/Irvine Stephen G. Brush, U. MD Johnneua B. Cole, Spelman Bruce Collier, U. Alberta Joel Cracraft, U. IL Brent Dalrymple, OR State Richard E. Dickerson, UCLA James D. Ebert, Chesapeake lest, of Johns Hopkins Niles Eldredge, AM. NR. Milton Fingemian, Tulane Douglas J. Futuyma, SUNY/SB Stephen J. Gould, Harvard Donald Homig, Harvard Donald Johanson, Inst. Hum. Origins Thomas H. Jukes, UC/Berkeley Patricia Kelley, U. No. Dakota Philip Kitcher, UCSD Richard C. Lewontin, Harvard Paul MacCready, Aeroviron, nenl, Inc. Kenneth Miller, Brown John A. Moore, UC/Riverside Dorothy Nelkin, Cornell William S. Pollitzer, U. NC Joseph E. Rall, NJJ!. Michael Ruse, U. Guelph Carl Sagan, Cornell James W. Skehan, S.J., Weston **Observatory** Tim. D. White, UC/Berkeley

A nonprofit, tax exempt corporation

Affiliated with the American Association for the Advancement of Science and the Notional Science Teachers Association

Executive Director

Eugenie C. Scott, Ph.D. 925 Kearney St. El Cerrito, CA 94530-2810 510-526-1674 Sponsor of the Committees of Correspondence

November, 1995

Dear Fellow Geologist,

A recent scientifically-conducted poll of adult Americans by the nonprofit organization, Public Agenda, showed strong sentiment for "teaching in a science class that the biblical view of creation and Darwin's theory of evolution are equally valid." Thirty-eight percent of the general public was in favor, suggesting a strong base of support for school boards or teachers who present sectarian religious views as science.

When over a third of American adults feel there is scientific validity to biblical literalism, the efforts of the "scientific" creationists, a small but determined band of antievolutionists attempting to support biblical literalism through alleged scientific data, appear to be paying off.

What sort of "science" is taught in creation science? In creationist geology, the geological column supposedly was laid down by the receding waters of Noah's Flood. Dinosaurs and people coexisted. The geomagnetic field has never reversed, and the velocity of light was much higher in the past. Continents either don't move, or sped to their present positions after the Ark landed at Ararat.

I don't think having students taught factual nonsense is good for science education, or for the profession of geology or other historical sciences. Students need to be taught that the universe has had a history, and that the world has changed through time. They need to learn evolution, not a distortion of scientific fact arid methodology.

If you agree that creation "science" needs to be kept out of the science curriculum of our schools, and that evolution needs to be kept *in*, then you should join me as a member of The National Center for Science Education, Inc.

NCSE is a small, nonprofit organization of scientists, educators, and others, that defends the integrity of what we all shouldn't take for granted: rational science education. NCSE is the only national organization whose primary activity is to tackle a major problem in education today: religiously-based opposition k) the theory of evolution.

National Center for Science Education, Inc.

I know it's hard to believe that evolution is still under attack in 1995, but the NCSE newsletter is full of reports showing just that. Even though courts in the United States have ruled that creation "science" is not science at all, and further, that advocating creationism as accurate scholarship violates the First Amendment, numerous organizations continue to press for teaching either scientific creationism or thinly-disguised substitutes like "abrupt appearance theory." In the last few years, active opposition to evolution has actually increased throughout the US and Canada. For example:

In British Columbia, **Canada**, Abbotsford school board members have just been ordered by the provincial Education Minister to stop teaching creationism in science classes, which has been Abbotsford's standard policy for years. It remains to be seen whether students will finally start learning standard geology and biology.

Local school boards in California, New Hampshire, Texas, South Dakota, Oregon, Washington, Minnesota, Louisiana, Arkansas, Iowa, and Ohio, among other states, have considered (or are considering) the introduction of "intelligent design theory", (a euphemism for creation science whose proponents simply don't identify the "designer") or straightforward antievolutionism (in the form of requirements that, when evolution is taught, it must be "balanced" by "evidence against evolution"). A district in Oregon even had a policy of inviting ministers to teach creationism in science classes! Alaska's state school board, fortunately, defeated a member's attempt to introduce creation "science", and Florida's legislature set aside a similar proposal. Isn't it amazing that these proposals appeared at such high governmental levels, years after the Supreme Court's 1987 ruling that teaching creation science is illegal?

Sometimes individual teachers teach creationism as science without waiting for a school board directive or a curriculum change. Lawsuits in **Ohio**, **Califor**nia, and Pennsylvania have discouraged this practice, but it continues because it has public support. In the Pennsylvania case, over 700 parents signed a statement in support of teaching creationism as a scientific theory in science classes.

Yes, creationism is still being taught as if it were legitimate science, *and* there is also pressure against the teaching of evolution. State curricula mandating what is to be taught from kindergarten to twelfth grade in **Alabama** and **Michigan** have watered down previous requirements that evolution be presented matter-of-factly. When evolution appears in these education frameworks, it is presented tentatively, as something you needn't take seriously: a guess, or hunch—the popular, not the scientific definition of "theory."

NCSE has received calls from parents in Colorado and California asking for advice on how to get evolution *into* the science curriculum. Some of the most poignant requests for help have come from teachers who are told by administrators not to teach evolution "because it is too controversial." When NCSE Executive Director Dr. Eugenie C. Scott attends science teacher conventions, she hears this complaint regularly.

National Center for Science Education, Inc.

The movement is beginning to affect some college classes, too, as members of "Genesis clubs" enter classrooms with disruptive (and difficult to answer) questions. How would you answer a student who claims that the presence of Polonium halos in granite demonstrates that granite had to have formed suddenly (i.e., was specially created)?

Still, problems at the college level are dwarfed by those at the high school and junior high levels. Many pre-college teachers don't have the background to teach science at all, let alone teach it well. Far too many high school science teachers across the country—even when they know better—"just skip those chapters" because evolution is a controversial subject. Others, worse yet, actually teach students that evolution never happened, that the universe as we know it was created just as it says in Genesis, with a literal Flood explaining the deposition of the Grand Canyon and the distribution of fossils in strata.

Fortunately for K-12 teachers and the rest of us, there is a place to go for help. The National Center for Science Education is composed of a network of scientists, teachers, and interested citizens that defends science education from sectarian religious intrusion. NCSE also defends science from those with political agendas, and strives (well) to explain science to the public and the media. This organization does a job that, frankly, no others do, and does its best work when it involves scientists like us

What does NCSE do? In addition to supporting grass-roots efforts to combat the teaching of creation "science" by providing a hot line and other services, NCSE has worked with state agencies to ensure that state science curricula explicitly and unequivocally include evolution; it has worked to give publishers access to scientific experts for pre-publication review of textbook content. NCSE has worked with national teacher organizations to improve pre-college teachers' understanding of science, and has even produced its first two videotapes for classroom use.

But the heart of NCSE's work is providing the all-important scientific and legal expertise and information needed to keep good science *in* the classroom, and scientific creationism *out*. NCSE does a lot: it provids advice on the creation and evolution problem, helps the media understand important issues in science education, advises curriculum developers, helps publishers improve the content of textbooks, and much more. NCSE is, indeed, *the* place people come to for information and help when they have to cope with creationism.

I've been a member of NCSE for many years, and I am proud to be associated with this organization. I hope I can persuade you to join with me as a member and contributor.

If you have not yet had an outbreak of scientific creationism or antievolution in your area, you probably will sometime in the future. I hope NCSE will be there to support the people in your community when they need this help. Furthermore NCSE needs to know *you* are there to provide information to individuals in your community who wish, as you do, to support good science education.

Please join NCSE by filling out the card that accompanies this letter.

National Center for Science Education, Inc.

For your \$25 annual membership dues, you will rece3ive four issues of a 24-page newsletter, *NCSE Reports*, that presents news about the creation/evolution controversy in the US, Canada, and abroad. (Yes, it is an international movement, active from Australia to Eastern Europe to South Africa.) You will also receive two issues of *Creation/Evolution*, a journal in which scientists explore the allegedly scientific arguments of creationists. Without the specialized information found in *Creation/Evolution*, most of us would be unprepared to counter these unscientific but scientific-*sounding* claims.

If you can donate \$50, NCSE will send you the revised and expanded second edition of its book, *Voices for Evolution*, a compendium of statements from scientific, educational, civil liberties, and religious organizations that support the teaching of evolution and oppose the teaching of scientific creationism. Teachers, parents, and school boards have used this book to demonstrate that evolution is not incompatible with religion, and that it is *not* educationally sound to "teach both sides, and let the children decide."

For a donation of \$100, NCSE will send you a beautiful book of extraordinary geological wonders, *Agents of Tim; the Art of Geology* by Bradford Van Diver.

And, if you can donate \$200 or more, NCSE will send you Arthur Strahler's encyclopedic compendium, *Science and Earth History, the Evolution/Creationism Controversy*. This is an excellent source of information on virtually all of the scientific issues in the controversy.

Please fill out the enclosed card and send it to NCSE today.

Sincerely yours,

G. Brent Dalrymple Past President, AGU

Brent Calypupe

p.s. NCSE is doing a great job at a difficult task. Please join us!