



The North Texas

Skeptic

Volume 17

October 2003

Number 10

<http://www.ntskeptics.org>

Don't mess with textbooks

The following is reprinted from a press release from the Texas Freedom Network. "The Texas Freedom Network advances a mainstream agenda of religious freedom and individual liberties to counter the radical right."

A standing-room-only crowd attended the second of two public hearings on biology textbooks before the State Board of Education (SBOE) in Austin on September 10. More than 160 people signed up to speak before the board, and the testimony concluded at 1:00 a.m. after twelve long hours of statements and questions by board members.

Supporters of quality science education, including members of National Center for Science Education (NCSE), Texas Citizens for Science, and the Texas Freedom Network, scientists from the University of Texas at Austin and around the state, educators, including many members of the Texas Association of Biology Teachers, and concerned parents, clergy, students, and citizens were out in force — many wearing "Don't mess with textbooks" t-shirts.

The Discovery Institute of Seattle, the organizing push behind inserting the Intelligent Design "weaknesses of evolution" in the biology textbooks, had a hospitality room in the Texas Education Agency for the press and their creationist supporters. They flew in their senior fellows, including Michael Behe, William Dembski, and Icons of Evolution author Jonathan Wells from all over the country to testify. Their strategy was repeated through each creationist testimony by citing the curriculum guideline TEKS 3A, which they interpret meaning "the strengths and weaknesses of evolution" must be discussed. Beyond science, worldviews were contemplated by creationist Mac Deaver testifying that, "There is a correlation between the acceptance of evolutionary theory and the degeneration of morals in our society."

Samantha Smoot, the president of the Texas Freedom Network, told the board, "The weaknesses of evolution alleged here today are founded on ideology, not science ... There's really no debate about any of this in the scientific community."

Board of Education textbook reviews

As we mentioned in last month's newsletter, it's circus time in Texas again. The State Board of Education is reviewing biology textbooks, and the creationists are putting on their dog and pony show. Texas and California are volume textbook purchasers, and the printing plates get set up according to what these states order. For some reason Texas holds an inordinate sway

over the process, and creationists are eager to exert their leverage at this sensitive location.

NTS Board of Directors member Greg Aicklen journeyed down to weigh in for the NTS, and he brought back a wonderful recount of the events. He was speaker number 96 out of well over 160. Presentations started at 1 p.m. and did not finish up until 1 a.m.

We have the transcripts of the presentations, and we are presenting a

number of them in this issue. The transcripts were produced by a court reporting service, which did not have our familiarity with the material. We have corrected some obvious dropped spelling and wording, but otherwise have left the text as we found it in the record.

Additional presentations, including those of some of the creationists, will appear in future issues.

North Texas Skeptics

Officers

President ····· Daniel Barnett
 Vice President ····· Curtis Severns
 Secretary ····· John Blanton
 Treasurer ····· Mark Meyer

Staff

Newsletter Editor ····· Keith Blanton
 Meetings and Social Director ····· Steven Graf

Board of Directors

Greg Aicklen, Laura Ainsworth, Daniel Barnett,
 Virginia Barnett, John Blanton, John Brandt, Prasad
 Golla, Steven Graf, Elizabeth Hittson, Jack Hittson,
 Mike Selby and Curtis Severns

Directors Emeritus Tony Dousette, Ron Hastings,
 Mark Meyer, John Thomas, Joe Voelkerling, and Mel
 Zemek

Scientific and Technical Advisors:

Joe Barnhart, Professor of Philosophy
 David E. Dunn, Ph.D., Geologist
 Raymond A. Eve, Ph.D., Professor of Sociology, UT
 Arlington
 Timothy N. Gorski, M.D., Physician
 Ronnie J. Hastings, Ph.D., Science Teacher
 Anthony P. Picchioni, Ph.D., Licensed Professional
 Counselor
 James Rusk, Director, Russell Planetarium
 Lakshman S. Tamil, Ph.D., Engineer
 John Thomas, Attorney

The North Texas Skeptics is a tax-exempt
 501 (c) (3) scientific and educational organization. All
 members receive the NTS newsletter and may attend
 NTS functions at which admission is charged at no or
 reduced cost. In addition, members will receive mailings
 on topics of current interest or social events.

Our newsletter, *The North Texas Skeptic*, is
 published monthly by The North Texas Skeptics, P.O.
 Box 111794, Carrollton, Texas 75011-1794.

Permission to reprint: Articles in *The North Texas
 Skeptic* may be reprinted without further permission,
 provided that *The Skeptic* is credited as the source, the
 mailing address above is listed, and a copy of the
 publication containing the reprint is sent to the Editor.
 Opinions expressed in *The Skeptic* are those of the
 individual authors and do not necessarily reflect the
 views of The North Texas Skeptics. Contents and logo
 © 2003 by North Texas Skeptics.

This view was confirmed by the testimony of research biologists such as Andrew Ellington, Matt Levy, Bassett Maguire, Marty Shanklin, Lauren Meyers, Edward Theriot, David Cannatella, Randy Linder, Arturo De Lozanne, and Art Woods of the University of Texas at Austin, whose testimony was a devastating critique of the Discovery Institute's assessment of the biology textbooks' treatment of scientific research into the origin of life.

Steven Weinberg, Professor of Physics at the University of Texas at Austin, addressed the common criticism that evolution is "just a theory" by remarking that his theory of the unified weak and electromagnetic interaction between elementary particles won him the 1979 Nobel Prize for Physics. He added that the existence of phenomena unexplained by a given theory is not, in his view, a "weakness."

Texas political icon Liz Carpenter, who served as press secretary to Lady Bird Johnson and went on to hold posts in four presidential administrations, eloquently urged the board not to "water down the strength of the science curriculum."

The Reverend Roger Paynter of Austin's First Baptist Church testified, "It is my deep conviction that creation flows from the hand of a creator God. But that is a statement of faith and not something that I or anyone else can prove in a scientific experiment. To lead children to believe otherwise is a disservice to them."

Creationists, for their part, were vocal, too. Mark Ramsey, of Texans for Better Science Education — who is also the secretary and a board member of the Greater Houston Creation Association — said, "I was indoctrinated, some would say brainwashed, to believe that evolution was as proven as gravity.... Today, over two decades later, many of us now know better."

SBOE members Terri Leo and Gail Lowe continued to lead the charge for the Discovery Institute, asking for the vote on out-of-state testimony and relentlessly questioning evolutionist, while sending softball questions to creationist to extend their 3 minute testimony limit.

Don McLeroy circulated his treatise entitled "Historical Reality Copernicus' "Heliocentric" Hypothesis Yes," which included a visual science fair display at the meeting, stating that if any textbooks presented common descent as historical reality, he would vote to reject them. During testimony, Dr. Sahotra Sarkar, professor of philosophy and integrative biology at University of Texas answered McLeroy's challenge, "Is Darwin's hypothesis on the same plane as Copernicus "Heliocentric" hypothesis?" Sarkar's response was "without a doubt even more so than Copernicus!"

Eight out-of-state witnesses, including five associated with "intelligent design," were not allowed to testify during the hearing; they were, however, permitted to make presentations to the board members after the hearing adjourned and to submit written testimony. Robert T. Pennock, professor and author of two books critiquing the Intelligent Design movement, stressed that the proponents of Intelligent Design are visible

at the SBOE level but not in debate in the scientific community, “They insert their view here, through the back door, by improperly appropriating the language of TEKS.”

The board will vote on proposed biology textbooks on November 7. □

Testimony of Steven Weinberg

Stephen Weinberg won the Nobel Prize for physics in 1979 along with Abdus Salam and Sheldon Glashow for their study of the unified interaction between weak power and electromagnetic power. He works at the Physics Department of the University of Texas at Austin, just a few blocks from where he presented this testimony before the SBOE textbook review panel.

Thank you for the opportunity to talk to you. I should say at the outset that I haven’t read the textbooks in question and I’m not a biologist. My Nobel prize is not in biology, but is in physics. But I have been a physicist for a long time. And I think I have a good sense of how science works.

It doesn’t deal with certainties. We don’t register things as facts that we have to swear allegiance to. But as mathematics and experiment progress, certain bodies of understanding become as sure as anything reasonably can be. They attract an overwhelming consensus of acceptance within the scientific community. They are what we teach our students. And the most important thing of all, since our time is so precious to us, they are what we assume as true when we do our own work.

Evolution — the theory of evolution through natural selection has certainly reached that status as a consensus. I’ve been through these issues not very much professionally in recent years, but I was on a panel of the National Academy of Sciences some years ago that reviewed these issues in order to prepare an *amicus* brief in a similar argument that was taking place in Arkansas at that time. At that time, it had reached the courts.

We know that there is such a thing as inheritable variations in animals and plants. And we know that these change through mutations. And it’s mathematically certain that as given inheritable variations, that you will have evolution toward greater adaptation. So that evolution through natural selection occurs can’t be in doubt.

As I understand it, many who want to put alternative theories into our textbooks argue that, although that may be true, we don’t know that that’s all that happens, that there is not some intelligent design that also assists the process of evolution.

But that’s the wrong question. We can never know that there isn’t something beyond our theories. And that’s not just true with regard to evolution. That’s true with regard to everything. We don’t know that the theory of physics, as it’s currently understood, correctly accounts for everything in the solar system. How could we? It’s too complicated. We don’t understand the motion of every asteroid in the asteroid belts. Some of them really are doing very complicated things. Do we know that no angel tips the scales toward one asteroid moving a little bit further than it otherwise would have in a certain time? No, we can never know.

What we have to do is keep comparing what we observe with our theories and keep verifying that the theories work, trying to explain more and more. That’s what’s happened with evolution and it continues to be successful.

There is not one thing that is known to be inexplicable through evolution by natural selection, which is not the same as saying that everything has been explained, because it never will be. The same applies to the weather or the solar system or what have you.

For the proponents of evolution and sound science, it was like having Sammy Sosa step in to bat cleanup for our side.

But I can say this, and many of the peak scientists here will have said, I am sure, the same thing. You must be bored hearing this again and again. But how can you judge? I’m not a biologist, you’re not biologists. There is a natural answer which is very congenial to the American spirit, I think. And that is, well, let the students judge. Why shouldn’t they have the chance to judge these issues by themselves? And that, I think, is the argument that many are making.

But judge what? Judge the correctness of evolution through natural selection? Judge the correctness of Newton’s law or the

conservation of energy or the fact that the Earth is round rather than flat? Where do we draw the line between the issues that we leave open to the student's judgment and the issues that we teach as reasonably accepted scientific facts, consensus theories?

The courts face a similar question. They often are presented with testimony or testimony is offered, for example, that someone knows that a certain crime wasn't committed because he has psychic powers or someone sues someone in tort because he's been injured by witchcraft. The Court does not allow — according to current doctrines, the Court does not allow those arguments to go to the jury because the Court would not be doing its job. The Court must decide that those things are not science. And the way the Court does is by asking: What — do these ideas have general scientific acceptance? Does witchcraft have general scientific acceptance? Well, clearly, it doesn't. And those — that testimony will not be allowed to go to the jury.

How then can we allow ideas which don't have general scientific acceptance to go to high school students, not an adult jury? If we do, we are not — or you are not doing your job of deciding what is there that is controversial. And that might be an interesting subject to be discussed, as for example the rate of evolution, the question of whether it's smooth, punctuated by jumps or whether it's — or whether it's just gradual. These are interesting questions which are still controversial which could go to students and give them a chance to exercise their judgment.

But you're not doing your job if you let a question like the validity of evolution through natural selection go to the students, anymore than a judge is doing his job or her job if he or she allows the question of witchcraft to go to the jury.

And why this particular issue of evolution? Why not the round Earth or Newton's theory or Copernicus, the Earth goes around the sun? Well, I think it's rather disingenuous to say that this is simply because there's a real scientific conflict here, because there is no more of a scientific conflict than with those issues.

Board Chair Geraldine Miller interrupted at this point, as the allotted time was up. However, the interruption was only to offer Dr. Weinberg additional time. He was, in fact, just finishing his last sentence, but the panel was eager for him to continue, so there followed a few minutes of general discussion. For the proponents of evolution and sound science, it was like having Sammy Sosa step in to bat cleanup for our side.



EDITORIAL

NTS Board member Greg Aicklen testified at the Texas Board of Education hearing on 10 September. Here are his remarks from the hearing transcript

Good afternoon. I'm going to consider it afternoon.

My name is Gregory Aicklen. I have a Ph.D. in electrical engineer from UT Dallas and I'm a partner in a business located in McKinney, Texas.

The Discovery Institute, with Raymond Bolin at point, is the prime mover behind the push to include intelligent design in Texas science textbooks. Although the Discovery Institute tries hard to hide it, science is not the Discovery Institute's main agenda. The Discovery Institute's goal is nothing less than the complete replacement of what they refer to as scientific materialism with, in their own words, a science constant with Christian and theistic convictions.

If the argument about evolution in textbooks were only about the science, the discussion would have been over decades ago. Evolution is well-tested and has easily survived every challenge to merge as the fundamental unifying concept of all the life sciences, but opponents of evolution understand that science is a true free market of ideas. Useful concepts thrive while unsupported, unproductive ideas are rapidly discarded.

Intelligent design fails — falls in the latter category and so intelligent design is cloaked in pseudo-scientific jargon, labeled scientific and presented in the arena of public opinion where its supporters hope for an undeserved victory. Simultaneously, antievolutionists try to inaccurately characterize evolutionary theory as a theory in crisis. The result is then a call for fair presentation of alternatives to evolution in our science classes, when in fact, there's no crisis and intelligent design is no alternative to evolution.

There are many people here today with better credentials than I who can tell you exactly why intelligent design is bad science and why evolutionary theory shines as one of the greatest scientific achievements. In this regard, I'm going to refer to those more eloquent. I want to talk about Texas and our future.

I have lived in Texas most of my life. I studied in Texas schools and have graduate degrees from a Texas university. My wife, a dedicated career teacher in our public school system, also studied here in Texas. We're both very proud to be Texans and have had the opportunity to receive a superior education in this state from our public institutions.

We want future Texans to be able to say the same. It would be difficult to overestimate the importance of a good science education. We need only look around us to see what science has brought as a basis for the technological marvels our engineers produce, the medical miracles we witness daily and as fuel for the economic engines that keep us fed and let us pay our Texas-size air conditioning bills.

If we allow antievolutionists to pressure textbook providers into inserting into our textbooks false weaknesses of evolution, the textbooks will simply no longer be accurate. Given the nature of modern textbook industry, this would result in dumbed down Texas editions of our textbooks that would result — that would be inferior to the texts used in other states. Our children, our future, would be at grave disadvantage when competing against students from other states or indeed other countries and throughout the rest of the world.

An understanding of evolution is critical in medical research, epidemiology, environmental sciences and other vital studies. We owe it to our future to teach science in the science classroom and reject pressure to politicize the teaching of science in Texas.



Test of astrology a no-show

by John Blanton

In March Jagdish C. Maheshri contacted us with an interesting challenge. I will reprint his note here:

Based on birth information alone (birth date, hospital-recorded birth time, and birth place) I, the applicant, will provide astrology-based readings for a group of five totally unknown subjects at a time. A double-blinded test methodology will be employed. (The preliminary procedural details are provided in the attached documents describing the entire test with definition of terms used in the proposed test and an illustration example. Please review all the test details and provide me with your comments. A positive test result constitutes achieving 5 hits in 10 or less runs.) I'm also attaching a spreadsheet detailing the probability calculations. [reference to spread sheet file]

Jagdish C. Maheshri holds a Ph.D. in electrical engineering, and he seems sincere in his belief in the possibilities of astrology. He asked us to work with him in devising a test using the

protocol he has devised, and we were eager to do that. The NTS has a standing \$10,000 award to anybody who can demonstrate the validity of astrology (and a bunch of other stuff, besides). However, Dr. Maheshri declined our offer of the prize and asked only for an honest test.

To this end we have failed. The task of performing the required test proved to be beyond our means.

The critical matter was the requirement for documented birth information. Dr. Maheshri's protocol required documented birth time and location information. Location was no problem—it had to be supplied only to the city level. However birth time to the nearest minute was required, and this proved to be too difficult to obtain. We solicited volunteer subjects, and we received a number of responses. However, none of the responses included the paper documentation required of Dr. Maheshri's protocol.

Lacking this documentation and the means to acquire it we have stopped our efforts related to the test. In this respect we will make the following statement regarding Dr. Maheshri's proposed test:

The underwriters of the NTS Paranormal Challenge agree that Dr. Maheshri has proposed a valid test of astrology. We agree his protocol is significant and meaningful, and we consider the failure to execute the test lies only with us and not in any part with Dr. Maheshri. We consider his hypothesis to be so far untested, and we do not make any claim regarding its validity.

The underwriters of the NTS Challenge are:

Gregory H. Aicklen
John F. Blanton
Prasad N. Golla
Michael T. Sullivan
John A. Thomas

Additional information about the NTS Paranormal Challenge plus this and other challenges can be found on our Web site:

<http://www.ntskeptics.org/challenge/challeng.htm>

Additional information about Jagdish C. Maheshri is on the Web. See, for example:

<http://www.boloji.com/writers/jmaheshri.htm>



What's new

By Robert Park

[Robert Park publishes the What's New column at <http://www.aps.org/WN/>. Following are some clippings of interest.]

FDA: is salmon a food or a dietary supplement?

The FDA will soon revise food labeling regulations, allowing companies to make health claims for their products with little scientific evidence. Currently, a health claim has to enjoy significant consensus from the scientific community to go on the package. Instead, claims will carry a grade from "generally accepted" to "you can't be serious." This is nearly as bad as dietary supplements, which can claim anything except to cure a disease. That was spelled out by the 1994 Dietary Supplement and Health Education Act, perhaps the worst "health" legislation ever passed (WN 27 Nov 98). Congress apparently punted in the food labeling rules.

Magnetic therapy: have we got news for you! it doesn't work.

A study in the Journal of the American Medical Association last week, "Effect of Magnetic vs Sham-Magnetic Insoles on Plantar Heel Pain," reports that a randomized, double-blind, placebo controlled trial of 101 adults diagnosed with plantar heel pain found no significant difference in outcome between use of active vs sham magnets. It was carried out by capable physicians from the prestigious Mayo Clinic. They even got the right answer. So what's the problem? The problem is the huge cost to society of disproving claims for which there was no evidence to begin with. Next we will learn that the Fish and Wildlife Service is funding a study of New York sewers to look for alligators.

Polygraph roulette: DOE has mastered "the expectation game."

A two-year study by the National Academy of Sciences, "The Polygraph and Lie Detection," showed polygraph testing to be less than worthless (WN 18 Apr 03). You might have expected at least a token decrease in testing by the Department of Energy. Instead DOE boldly reissued the old policy, which would subject about 20,000 employees to random character assassination. There was an immediate outcry from employees, and Sen. Pete Domenici (R-NM) convened an Energy Committee oversight hearing on Thursday, where DOE announced that a mere 4,500 employees with top-secret clearance or positions in intelligence will now be subject to having their careers trashed by polygraph roulette. It was a victory for Sen. Domenici, who praised DOE for

its enlightened policy. But nothing in the NAS study says the polygraph works better if you have top-secret clearance.

Intelligent design: who designed the state of Texas?

Even as the state Board of Education is selecting textbooks to be used in Texas science classes for the next decade (WN 11 Jul 03), there is a petition movement in Montgomery County, TX to require equal time for teaching Intelligent Design. In a poem, familiar to school children in Texas, the Devil asks the Lord if he had anything left over when he created the land. "The Lord said, 'yes I had plenty on hand, but I left it down by the Rio Grande.'" The devil proceeds to use the left-over land to build his own Hell Texas.

Evolution: Weinberg defends rights of Texas school children.

Unreported by the media, scientists from the University of Texas and other Texas institutions met with the Texas State Board of Education on the evening of Sep 10 to support the teaching of evolution (WN 29 Aug 03). Physics Nobelist Steven Weinberg was reportedly at his charming best defending the right of Texas school children to learn natural laws that govern our existence.

Missile defense: APS boost-phase study - it's about time.

On Tuesday, the APS held a Washington press conference to release a massive 3-year study of the feasibility of attacking a ballistic missile while its rockets are still firing - the first layer of the president's missile defense plan. Rockets may be easy to spot, but even if it's forty-year old technology, boost phase only lasts four minutes; newer solid-fuel rockets, maybe three. Conclusion? You're not gonna get there in time. And even if you could, countermeasures are easy. In other words, the best boost-phase interceptor would be obsolete as soon as it's built. The study's authors studiously declined to draw policy implications. What's New is under no such constraint. As one physicist who read the report put it, "Even if it would work it wouldn't work, but it won't work." A week before release of the APS study, the Senate slashed funding for boost-phase interceptor development.

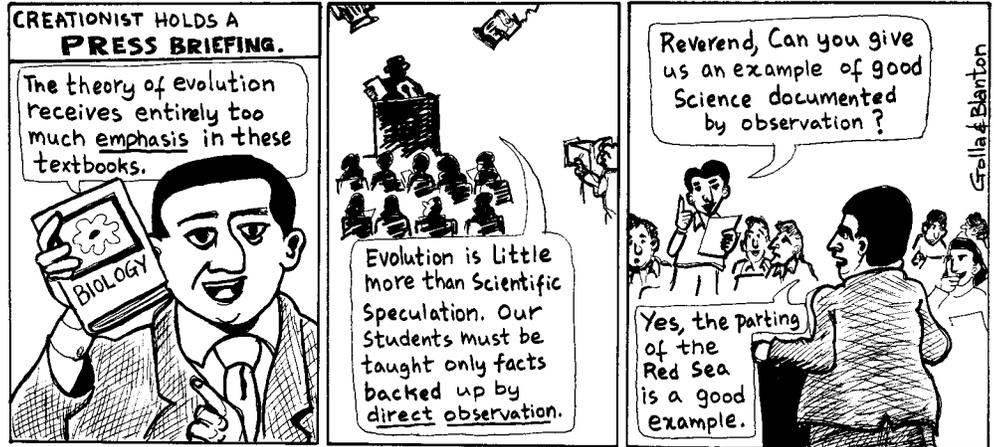
NASA: could an astronaut learn to survive by photosynthesis?

Perhaps the Columbia accident convinced NASA that a backup plan is needed in case astronauts are stranded on the Space Station (WN 14 Mar 03). According to the Hindustan Times, NASA turned to a survival expert, Hira Ratan Manek, a

Skeptic Ink

by Prasad Golla and John Blanton.

© 2003. Free, non-commercial reuse



64-year-old mechanical engineer from India. Manek claims to have survived for eight years on sunlight, water and a little tea. He is in the United States to show NASA how he does it. NASA scientists reportedly verified that Manek survived on water and sunlight for 130 days. The NASA Public Affairs Office confirmed to WN that the claim is true. This is a bold new approach. If the laws of nature stand in the way of a solution, it's time to change the laws.

Error: NASA refutes story about a man who lives on sunlight.

Last week, WN picked up the story from Space Daily, which got it from the Hindustan Times, about a guy in India who claims he can survive on water and sunlight and who was invited to the US by NASA. WN called NASA and thought it confirmed the invitation. However, NASA insists they said there had been no contact with him. WN deeply regrets the confusion. It will now be WN policy to avoid anything that photosynthesizes lest it fall on Bob Park.

Junk science: medical societies review "expert" testimony.

No scientific claim is so preposterous that an "expert" witness cannot be hired to vouch for it. But just 10 years ago in its "Daubert" decision, the Supreme Court instructed federal judges to act as "gatekeepers," ensuring that juries are not exposed to scientific nonsense. Medical societies now impose sanctions on doctors whose testimony doesn't meet scientific standards.

(Andrew Essin contributed to this issue of What's New.)

Bob Park can be reached via email at opa@aps.org



EVENTS CALENDAR

October Program

Saturday, October 11, at 2 p.m., Center for Community Cooperation, 2900 Live Oak Street in Dallas (Free Admission)
For more info: (214) 335-9248

Debate with a Creationist

Skeptic John Blanton will debate creationist Jason Gastrich by phone. Gastrich offered to debate us on the topic of creationism versus evolution. He has previously debated on creation, evolution, sin, prophecy and many other topics. He has attended various Bible schools and has obtained a Master of Arts in Bible and Theology. He is working on a Ph.D. in biblical studies. He is currently running for Governor of California.

Social dinner, board meeting

October 25, at 7:30 p.m., at the Black-eyed Pea Restaurant, Forest Lane in Dallas (one block west of Central Expressway). Let us know if you are coming. We sometimes reschedule or cancel these events.

214-335-9248 (hotline) or skeptic@ntskeptics.org

North Texas Skeptics
P.O. Box 111794
Carrollton, Texas 75011-1794

FIRST CLASS

Address Correction Requested

Application for Membership

Name _____
Address _____
City _____ State _____ Zip _____
E-Mail address _____
Home Phone _____ Work Phone _____
Occupation _____
Special expertise and/or interests _____

Name _____
Address _____
City _____ State _____ Zip _____

Membership agreement:

Yes, I agree with your purposes in exploring paranormal and pseudoscientific claims from a responsible and scientific point of view, and while I do not endorse the a priori rejection of paranormal phenomena and pseudoscientific claims, I believe that such claims must be subjected to the fair and systematic testing which rational enquiry demands.

Signature _____ Date _____

Indicate your choice:

Member: A voting member and newsletter recipient. Family privileges included. Annual dues \$35.00

Newsletter recipient: No membership privileges. Annual subscription rate \$15.00

Receive a \$5 discount on either of the two newsletter subscription levels above by choosing to receive your newsletter by e-mail only.

Introduce a friend to *The North Texas Skeptic*: Let us send a **FREE** three-month gift subscription of *The Skeptic* to this individual (or institution).

Enclosed is a tax-deductible donation to The North Texas Skeptics in the amount of \$ _____.

Bill me: Please bill me for the choices I have made above.