



NMSR Reports

The Newsletter of the
New Mexicans for Science and Reason

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NMSR Reports, David E. Thomas, Editor, P.O. Box 1017, Peralta, NM 87042

FEBRUARY MEETING:
NEW MEXICANS FOR SCIENCE AND
REASON WILL HEAR
Robert Bartholomew, on
“Champ, a Lake Monster Legend”
WEDS., February 13th, 2013, 7 PM
==>MUSEUM OF NATURAL
HISTORY AND SCIENCE<==
==>1801 Mountain Road NW<==
Multi-Purpose ROOM (left of Atrium)
Bring a friend

some assert, that Champ is a zeuglodon or plesiosaur: creatures that have supposedly been extinct for millions of years? What are we to make of Elizabeth von Muggenthaler's 'discovery' of a mysterious creature in the lake that uses biosonar to get around? What is depicted in the celebrated 1977 photo snapped by Sandra Mansi? In this book I chronicle key sightings and events through the decades, and reveal the actions and personalities of the modern-day monster hunters; their egos, obsessions and behind-the-scenes squabbles.” **FREE and open to the public**
Wednesday, February 13th, 2013, 7:00 PM, New Mexico Museum of Natural History and Science. Information: 268-3772



Tuesday Feb. 12th: Darwin Day at UNM This event will start at 7:00 PM, in Ballroom A of the UNM Student Union Building (SUB). As of press time, speakers

include Dave Thomas, Ron Herman, and Jim Travis. Sponsored by Secular Students of UNM, FFRABQ, and Humanists of Albuquerque. Free.

Coming in March: Cool Maths

The March 13th meeting will feature John Geohegan on mathematical statements that are apparently true but can't be proven. Dave Thomas will talk about set theory and skepticism (Polygraphs, Bell's Inequality, Hidden Variables in Quantum Mechanics.)

Coming on April 10th: UNM's Carl Agee, on "Discovery of a New Unique Water-rich Meteorite from Mars". Come hear about this exciting work!



Coming on June 12th: Ellen Stechel, "Fuels from the Sun and Waste Carbon Dioxide".

February 13th Meeting – “Champ” Lake Monster, with Robert Bartholomew



Robert E. Bartholomew, Live Remote from Auckland, New Zealand! *Skype Willing, Robert will be speaking on his new book, The Untold Story of Champ: A Social History of America's Loch Ness Monster, State University of New York Press, December 2012*

Robert writes “It sets the record straight on the many claims made about Champ from the standpoint of mainstream science. Over the years authors, reporters, researchers and local politicians have blurred the line between fact, fiction and speculation to the point where it is no longer recognizable. What is the likelihood, as

New Mexicans for Science & Reason (NMSR)

NMSR is a non-profit group with the goals of promoting science, the scientific method, rational thinking, and critical examination of dubious or extraordinary claims. NMSR meets at 7 PM on the second Wednesday of each month, in Albuquerque, New Mexico, at the UNM Law Building (1117 Stanford NE, Room 2402, toward the west [golf course] side of the building). *NMSR Reports* is its official newsletter.

NMSR officers:

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Membership: \$25/year, includes newsletter, check payable to NMSR, send to treasurer (Shelton).

Newsletter subscription: \$15/year (12 issues)

NMSR Advisors:

• *Mark Boslough,*

Physicist (Impacts, Climate Change, Global Warming). Sandia National Labs.

• *Robert Cormack*

Professor of Psychology, NMIMT

• *Kendrick Frazier*

Editor, *Skeptical Inquirer*

• *John Geissman*

Professor of Paleomagnetism, UNM

• *Alan Hale*

Southwest Institute for Space Research

• *Randy Thornhill*

Professor of Biology, UNM

Cyber-Cypher Clue: W = J

Bonus Puzzle Clue: Clue? Hey, it's *supposed* to be hard!

WANTED: READER ARTICLES AND COMMENTARY

Got something you want to share with NMSR members? Send it in! **ATTN: Dave Thomas, Editor, NMSR Reports.**

REMEMBER, our next regular NMSR meeting is at 7 PM on **WEDNESDAY, February 13th, 2013,** at the **NEW MEXICO MUSEUM OF NATURAL HISTORY AND SCIENCE!**

PUZZLE TIME!

[Please send solutions to Dave Thomas at: nmsrdave@swcp.com, or at P.O. Box 1017, Peralta NM 87042.]

Cyber-Cypher**FEBRUARY PUZZLE**

(Submitted by Dave Thomas)

The following letters are a simple substitution cypher. If R stands for L, R will stand for L everywhere. Your Cyber-Cypher Clue: Clue? Oh, well - if you must, see p. 2.

" K X L Z M F T G J F B F M Y K Q T L
 N D Z K X J L X G K X L
 Z Y F L F J X D C Y K Q T L . Q T
 N D S T H X F P T P E F Z Z F C T Z
 D G P E F Z H X F P T P E T G . " -
 E D L J F G C X J N T L R F G H
 W L .

SUPER SECRET WORD!

However you prefer to do the cypher itself (above or below), simply **duplicate those actions** on the alphabetized row of cypher letters below. You'll build an answer key, **and** you'll also reveal - the *Super Secret Word!*

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

JANUARY CYPHER SOLUTION

"A FANATIC IS ONE WHO CAN'T CHANGE HIS MIND AND WON'T CHANGE THE SUBJECT." - SIR WINSTON CHURCHILL

Esteemed January Code Crackers: **Mike Arms***, **Terry Lauritsen***, **Ken Lynch***. *Secret Word: **NEW BRUTALISM**

February Bonus : "A SIMPLE MULTIPLICATION"

Submitted by *John Geohegan*

This problem is intended as a warm-up for

the upcoming March meeting, showing how hard it is to factor the product of a simple multiplication:

The February Bonus: What two prime numbers multiplied together equal 70,531?

January Bonus Solution: “Nyuk Nyuk - A Half a Loaf is Better than What?”

Submitted by Dave Thomas

The Three Stooges walked into a Deli to buy some bread. Moe bought half the bread remaining on the shelves, and half of a loaf more. Larry and Curly each did the same. After they had left, the baker promptly closed the Deli, as his bread was sold out. Surprisingly, the baker didn't need to cut even one loaf.

The January Bonus: how many loaves were on the shelves when the Stooges came in?

ANSWER: Seven loaves..

JANUARY BONUS SOLUTION SOLVERS: Paul Braterman (UK), Keith Gilbert (NM), Mike Arms (NM), Bob Schmidt (NM), Terry Lauritsen (NM), Eric Hanczyc (WA), Steve's brother-in-law (IL), Harold H. Gaines (KS), Mary LaPoint (NM), Ken Lynch (TX), Rocky Stone (NM). *Congrats!!*

January Meeting: Gover on Innovation— Jan. 9th

Our January meeting featured James Gover, who spoke on “**Job Creation, Innovation and Competitiveness.**” James' entire presentation, facts and figures included, is posted as a PDF file (Adobe Acrobat Reader) on the NMSR website, at www.nmsr.org/INNOVATIONPP.pdf.



Here are the recommendations James made for promoting creation and innovation:

1. We propose that NIH spend 10 percent of its R&D budget on healthcare services productivity growth, healthcare cost reduction and disease prevention and that Department of Education spend its R&D budget on increasing the productivity and quality of education.
2. We propose that any educational institution receiving federal R&D funds be required to offer education options that can be pursued for no more than \$10,000 for a four-year education.
3. We propose that companies employing an electrical or computer engineering or computer science student in a co-op or intern position be permitted to pay one term of that student's tuition for each term of work and take that tuition payment as a tax credit.

4. We propose that government-owned laboratories be required to (1) employ 1 percent of their total workforce as electrical or computer engineering students in co-op or intern positions and (2) pay one term of each student's college tuition for each term of work.
5. We propose that each university receiving federal R&D funds be required to use 10 percent of its federal R&D funds to promote innovation by establishing and nurturing an economic ecosystem that spins off entrepreneurs and small companies. We recommend that states match the federal innovation investment at each of its public universities. We also recommend that the innovation history of a university be a consideration in selection of university projects to fund by any federal agency.
6. We propose that each government-owned laboratory be required to use 10 percent of its federal R&D funds to promote innovation by establishing and nurturing an economic ecosystem that spins off entrepreneurs and small companies. We also recommend that the innovation history of a government-owned laboratory be a consideration in selection of which government-owned laboratory to fund by any federal agency.
7. We recommend that the Federal Government task a panel of distinguished scientists and engineers from universities to identify the top 20 most important research inventions and resulting innovations in the past 25 years from each government-owned laboratory. This effort should be updated every five years.
8. We propose that the H1B Visa Program establish a special category for immigrant entrepreneurs called H1BE and that this program be open to any foreign-born scientist, business-person or engineer who meets H1B requirements and wishes to come to the US to start a new company. However, if after 5 years an H1BE immigrant has not started a new company that employs 20 or more people, they will not be eligible for receipt of a green card.

NMSR thanks Jim Gover for an engaging presentation.

Climate Change Redux

By Dave Thomas.

The Albuquerque Journal's latest round of op-eds on the topic of climate change and global warming got its start with a column by E. Thomas McClanahan of the Kansas City Star on January 23rd, titled “‘Climate Change’ Fearmongers Lose Ground to Data.” McClanahan argued that warming has actually ceased since 1998, that the “ClimateGate” scandal of 2009 was a “major blow”

to the theory of global warming, and so forth.



Michael Behe) to science teachers in New Mexico back in 2002.

Colleague Ken Frazier's letter to the Journal has not yet been printed, so we are pleased to include it here.

Ken Frazier's Letter to the Journal



The op-ed syndicated column "'Climate Change' Fearmongers Lose Ground to Data" (Jan. 25) badly misconstrues the facts.

It was inevitable that as soon as the National Oceanic and Atmospheric Administration announced on Jan. 15 that globally 2012 was the tenth warmest year on record (ninth warmest according to NASA, which uses slightly different techniques), some would try to twist that news to imply that global warming is over, exaggerated, or no longer a concern. Hardly. Only nonscientific ideologues assume that a short-term dip in any long-term rise in an average invalidates the rising trend.

Here are a few things the column conveniently failed to mention (they are in the same NOAA report):

- ♦ For every single year since 1976 global temperature averages have been above the long-term average (records have been kept since 1880). Think about that. For 36 years in a row temperatures have been warmer than the long-term average.
- ♦ During that period, every decade has been warmer than the previous decade. And, despite the less-than-record temperatures of 2012, the first three years of the present decade are warmer than the first three years of the previous decade.
- ♦ The long-term trend is still up, noticeably. The physics of the main greenhouse gas, carbon dioxide (annual levels rising every year since measurements began in 1958) show why the warming is happening and dictate that these warming trends will continue.
- ♦ 2012 was a "La Nina year," which means there was a cyclical (temporary) external cooling function underway. That slightly cooled some parts of the globe (not, unfortunately, the United States, which as we know suffered its hottest year on record, and most of North and South America and Africa and much of the oceans). Nevertheless, according to NOAA, 2012 was the warmest LaNina year on record! We can't depend on occasional LaNina years to counter the enormous warming effects scientists have long predicted.

It is belittling and disingenuous to pretend climate scientists are fearmongers. In fact they are being responsible scientists, accurately monitoring and understanding our changing climate as best they can, and warning that we are altering our own atmosphere in ways that endanger our well-being. KENDRICK FRAZIER

Members of NMSR's email list began discussing how best to respond, and a reply editorial was drafted by Dave Thomas, Mark Boslough, Paul Braterman, and Kim Johnson. Our editorial was published on February 4th, under my name as NMSR president, with the notation "*This column was co-signed by 17 members and officers of New Mexicans for Science and Reason.*" Many thanks to our co-signers, who included Mark Boslough, Paul Braterman, Kim Johnson, Ted Cloak, Marilyn Savitt-Kring, Steve Brugge, Marshall Berman, Terry Dunbar, Robin Brewster, Harry Murphy, Nancy & Jerry Shelton, John Derr, Marvin Mueller, Marvin Moss, and Rocky Stone.



The NMSR op-ed is online, here: <http://www.abqjournal.com/main/2013/02/04/opinion/writer-wrong-on-climate-change.html>

The Journal published another op-ed on Feb. 7th by Phil Robinson, extolling the virtues of planetary warming and of increased carbon dioxide. Robinson is not unknown to NMSR, having gotten our attention in the past by sending copies of the creationist tome "Darwin's Black Box" (written by

NMSR's Feb. 4th Op-Ed

(includes material cut by the Journal.)

Dear editor,

You have recently published a series of op-ed pieces casting doubt on the very existence of global warming caused by human activity, the most recent being that by E. Thomas McClanahan on January 25th.

Your readers should be aware that the national scientific academies worldwide (not the governments) of the United States, the United Kingdom, and the 11 other G5+8 countries all agreed in 2009 that "Climate change is happening even faster than previously estimated; global CO2 emissions since 2000 have been higher than even the highest predictions, Arctic sea ice has been melting at rates much faster than predicted, and the rise in the sea level has become more rapid."

We hope McClanahan would agree that his dissent from the mainstream science merits close intellectual scrutiny. We therefore offer these critical observations.

- McClanahan's assertion that "global warming" has been renamed "climate change" to cover for real warming "stopping" in recent years is ludicrous on many levels.

Predictions of of global warming from human emissions of carbon dioxide date back to 1896. The expression "climate change" appears in physicist Gilbert Plass's landmark 1956 article "The Carbon Dioxide Theory of Climatic Change", while the term "global warming" was coined somewhat later (Wallace Broecker, "Climatic Change: Are we on the Brink of a Pronounced Global Warming?" 1975).

It was the Bush strategist Frank Luntz, in a 2003 memo, who suggested that GOP politicians refer to "global warming" as "climate change" to make it sound less frightening. It also proposed making a supposed lack of scientific certainty a "primary issue" in the political debate on climate.

- McClanahan attempts "guilt by association" by conflating "greens" with "scientists." Certainly, not all scientists are environmentalists, but the great majority of scientists actively researching and publishing on climate change agree that humans are causing most if not all global warming by releasing greenhouse gases into the atmosphere.

- Anthony Watts is not a research meteorologist, and only has the training needed to read the weather on television. He is funded by the denialist Heartland Institute, and uncritically channels material from web postings. Understanding earth's climate requires more work than simply doing a Google search for "global warming."

- McClanahan says that the so-called "ClimateGate" scandal was a "major blow" to the theory of global warming. What happened was that the technical jargon used by one scientist at one small university in one stolen email was claimed to be evidence of "fraud," but only by those who already believed that "climate change is a myth." Numerous investigations by state and national agencies on two continents have cleared the scientists involved of any scientific wrongdoing.

- McClanahan says there has been "no significant warming since 1998." This is simply wrong - there has been significant climatological warming since that year. The word "climate" refers to a multi-year average, and the climatic average temperature is significantly higher now than it was in 1998. If a stock broker advising a client misrepresented one cherry-picked single value as a trend, the same way McClanahan misrepresents global temperature, that broker would lose his license, and perhaps go to jail.

McClanahan appears to have a connection to the journalism business. He should be aware that both scientists and journalists have a professional obligation to check facts, and to tell the truth. His claim that "global warming seems to have ceased" is factually false.

If you want to believe that climate change is just a "liberal hoax," then you will only find validation in the pseudoscience put forth by pundits like McClanahan and Watts. If you would like to know why real scientists are worried, go to a meeting like the American Geophysical Union, where the debates over the details are fierce and passionate, but where deniers of the reality of human-caused global warming are virtually non-existent.

Our professional colleagues who study the earth's past and present climate are very alarmed by what they see happening now. Those who are currently traveling to the Arctic, Greenland, and the Antarctic are bringing back worrisome observations of increasing large-scale glacial melting and calving. The climate crisis is every bit as real as our current economic doldrums, and potentially far more costly in the long run.

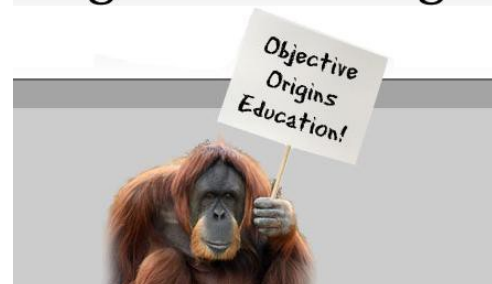
David E. Thomas is physicist and mathematician, and is the President of New Mexicans for Science and Reason (NMSR). This column was co-signed by 17 members and officers of that organization.

Origins Education Site Hacked!

While several creationist bills are being considered in state legislatures around the country, nothing has surfaced yet here in New Mexico. In fact, the website used to promote creationist bills here in New Mexico in 2007, 2009 and 2011, www.originseducation.org, has been down for weeks, saying only this:

hacked by Hmei7

OriginsEducation.org



The group Hmei7 is noted for thousands of site hacks; we don't know why the NM site was targeted. If a bill does materialize in this session, you'll be able to find out about it at www.nmsr.org.

Study Rebuts Hypothesis That Comet Attacks Ended 9,000-Year-Old Clovis Culture

ScienceDaily.com reported on January 30th on the "Clovis Comet" hypothesis:

"Rebutting a speculative hypothesis that comet explosions changed Earth's climate sufficiently to end the Clovis culture in North America about 13,000 years ago, Sandia lead author Mark Boslough and researchers from 14 academic institutions assert that other explanations must be found for the apparent disappearance. 'There's no plausible mechanism to get airbursts over an entire continent,' said Boslough, a physicist. 'For this and other reasons, we conclude that the impact hypothesis is, unfortunately, bogus.'

In a December 2012 American Geophysical Union monograph, first available in January, the researchers point out that no appropriately sized impact craters from that time period have been discovered, nor have any unambiguously 'shocked' materials been found.

In addition, proposed fragmentation and explosion mechanisms "do not conserve energy or momentum," a basic law of physics that must be satisfied for impact-caused climate change to have validity, the authors write.

Also absent are physics-based models that support the impact hypothesis. Models that do exist, write the authors, contradict the asteroid-impact hypothesizers.

The authors also charge that 'several independent researchers have been unable to

reproduce reported results' and that samples presented in support of the asteroid impact hypothesis were later discovered by carbon dating to be contaminated with modern material.

Boslough has a decades-long history of successfully interpreting the effects of comet and asteroid collisions.

His credibility was on the line on in July 1994 when Eos, the widely read newsletter of the American Geophysical Union, ran a front-page prediction by a Sandia National Laboratories team, led by Boslough, that under certain conditions plumes from the collision of comet Shoemaker-Levy 9 with the planet Jupiter would be visible from Earth.

The Sandia team -- Boslough, Dave Crawford, Allen Robinson and Tim Trucano -- were alone among the world's scientists in offering that possibility.

'It was a gamble and could have been embarrassing if we were wrong,' said Boslough.

The NMSR e-mail list is fun! It's an e-mail list with news announcements of interest to NMSR members, discussions about news of the times, and more. To join, send a request to nmsrdave@swcp.com.

Thanks to: John Geohegan, Debbie Thomas and our Puzzlers!

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Bartholomew on Lake Monsters!

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