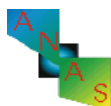


"Cupcake rock", Sedona, AZ. (Photo by T.G. Manno)



President's Corner

Robert McCord, ANAS President

As the Academy moves into the 21st Century, we, like other societies, must establish our continuing relevance. We do so by identifying our strengths, abandoning our weaknesses, and embracing emerging trends and needs.

Our strengths include a continuing journal with a long track record, our activities in supporting science education, and a stable financial foundation to continue. Our weaknesses center around membership. We are too small, we have trouble recruiting leadership, and we lack a healthy diversity of scientific backgrounds.

I am firmly convinced

that new members are recruited primarily by one on one interactions. It is a continuing refrain of mine but one worth repeating: when was the last time you recruited a peer or student into the Academy?

Low membership creates a small pool for filling leadership positions. Further, the current officers have a natural tendency to recruit people they know into leadership positions, resulting in limited backgrounds and diversity of our Board of Governors, journal reviewers, and committee chairs.

Those among you who are optimists should recognize that this also means that we are an organization that has real

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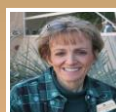
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Editor, T. G. Manno, Ph.D., snuggysquirrel@yahoo.com

leadership opportunities for anyone interested. Right now we have two board members (President-Elect and Recording Secretary) that are serving double duty as Northern Arizona and Nevada Directors, respectively. If you are (or know a colleague who might be) interested in one of these jobs and are geographically appropriately located, let me know! Positions open all the

President's Corner continued on page 8

WHERE ARE THEY NOW?

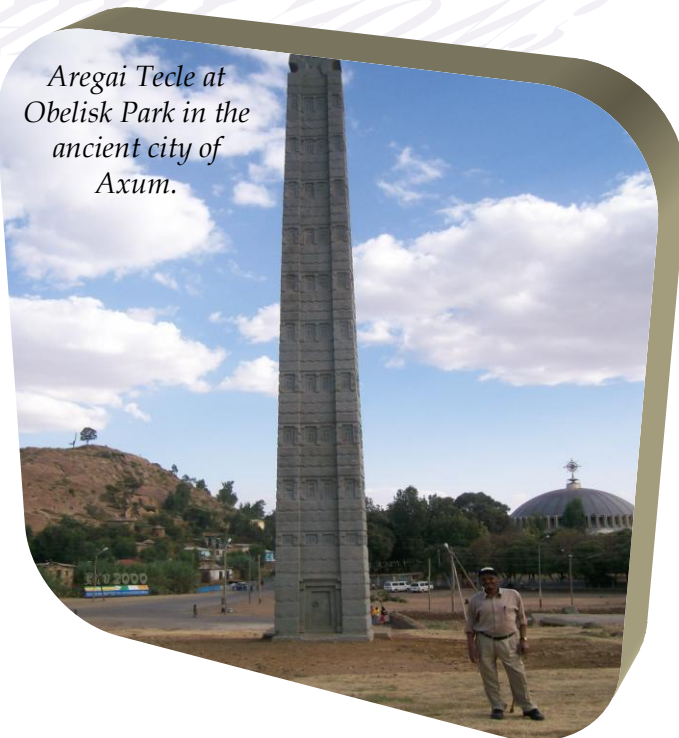
By: Boris Poff

Dr. Aregai Tecle, Hydrology Professor at Northern Arizona University's School of Forestry, has been involved with ANAS over 10 years, serving on the Board of Governors in several positions, including Director for Northern Arizona and President. Currently, Dr. Tecle is on sabbatical in Addis Ababa, Ethiopia. He has been there since July of 2009 and is expected to return this June.

Since his sabbatical began, Dr. Tecle has been working feverishly at both the Africa Union and at the oldest and most premier university in his native Ethiopia. In many parts of Africa, things we take for granted in the developed world, such as offices with computers, can be hard to come by. However, Dr. Tecle used his native skills to secure not only one office, but excellent offices (equipped with functioning computers) in both places. Indeed, his prestige led to having his choice of resources from the university.

Those who know Dr. Tecle well may call him a workaholic. He is no different when he is on sabbatical. He works at Africa Union on Mondays, Wednesdays and Fridays. There he conducts research on (1) conflict early warning and

*Aregai Tecle at
Obelisk Park in the
ancient city of
Axum.*



Continued on page 5

ARIZONA-NEVADA MUSEUMS SPECIAL EXHIBITS

Desert Botanical Museum

Papago Park, Phoenix, AZ
<http://www.dbg.org/>

Allan Houser-Tradition to Abstraction, collaborative exhibit with Heard Museum
Garden Flashlight Tours-May 1 to August 28, 2010
Creatures of the Night-May 17, 2010

Arizona Museum of Natural History

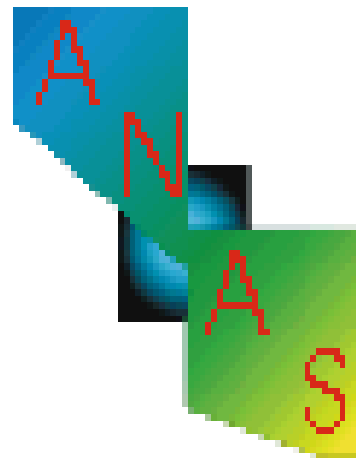
Mesa, AZ
<http://www.azmnh.org/Home.aspx>

Therizinosaur: Mystery of the Sickle-clawed Dinosaur, through July 2010
Prehistoric Pronghorn: Ancient Antelope, through July 2010

Phoenix Zoo

Phoenix, AZ
<http://www.phoenixzoo.org/>

Prowl and play: specific dates through August 2010



9 April 2010: Arizona-Nevada Academy of Science
54th Annual Meeting held at Northern Arizona University



Steven Shuster, selection committee chair, congratulates Ellis Scholarship winner Rachel Murray



President Elect Jibrin and President McCord



Guest speaker David Gillette

The 54th Annual Meeting of the Arizona-Nevada Academy of Science was held in Flagstaff on April 9th. Presentations and posters represented a variety of scientific disciplines, including psychology, hydrology, geology, biology, chemistry, and mathematics.

Highlights

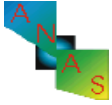
Best Student Papers:

- Peter Koestner, Rocky Mountain Research Station, "Patterns and Trends in Stream Flow from 1938 to 1980 at Workman Creek, Sierra Ancha Experimental Forest, Arizona"
- Rickey Bartlett, Northern Arizona University, "Predation Damage to Brachiopods From the Pennsylvanian of Arizona and New Mexico"

Best Student Posters:

- Janky Patel, Arizona State University, "Vitamin D Regulates the Gene Expression of S100A2 Located in the Epidermal Differentiation Complex with Implications for Skin Disease"
- Nam Nguyen, Arizona State University, "Are Difficult to Culture Organisms More Hungry or Lonely? Application of a Tissue Culture Insert (TCI)-Based Approach to Cultivating Microorganisms Indigenous to Kartchner Caverns, Arizona"

The luncheon speaker was David Gillette from the Museum of Northern Arizona. He spoke on the "Therizinosaur" Mystery of the Sickle Claw Dinosaurs."



Two New Fellows Selected

At the annual meeting, the membership also confirmed the nominations of Robert McCord and Karen Conzelman as Fellows of the Academy. Fellows are members of the Academy who are recognized for the scientific work and/or contributions to the Academy.

Karen A. Conzelman obtained a Ph.D. from Yale University in 1987, and since then has been a faculty member in the Department of Biology, Glendale Community College. Karen has served as ANAS Treasurer since 1995. She has been a leader in ANAS Science Education, has received over a dozen honors for educational achievement and has authored 16 modules, animations and publications on science and science education. From 2003-2009 Karen administered \$80,000 in grants from Salt River Project, the Employee Community Fund of Boeing, Southwest Gas and Phelps Dodge to the Arizona Science Olympiad. In 2005 she successfully combined the finances of the Arizona Science Olympiad with those of ANAS and sponsored the addition of a Science Olympiad/Science Bowl Liaison to the ANAS Board of Governors.



Karen Conzelman



Robert Dudridge McCord obtained a Ph.D. from The University of Arizona in 1997, and from 1998 to present he has been the Curator of Paleontology at the Arizona Museum of Natural History (formerly Mesa Southwest Museum). Bob has been a member of ANAS since 2005, and has served as chair of the ANAS Geology Session since 2006. Prior to then he served as Chair of Society of Vertebrate Paleontology annual meetings in 2004-2005, and as Chair of Southwest Paleontological Symposium of Mesa Southwest Museum from 2003-2005. Robert McCord is author of 47 scientific publications and editor of 5 volumes of Mesa Southwest Museum Bulletin including the special volume: "Vertebrate Paleontology of Arizona".

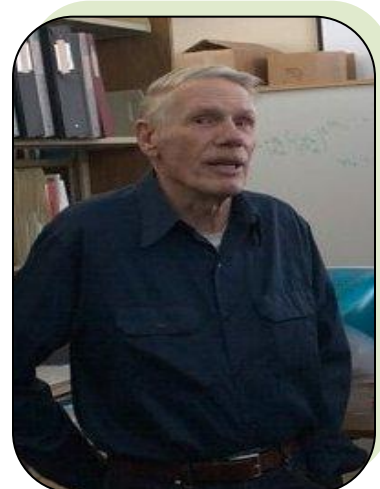
Robert McCord (left) with "Best Student Paper" winner Peter Koestner at April meeting

Save the Date for the 55th Meeting in Glendale, AZ on 10 April 2011. Festivities will take place at Glendale Community College.

Ellis Scholarship:

Rachel Murray was selected from among several outstanding applicants to receive a \$1000 scholarship from the Academy. The Ellis Scholarship is awarded to a graduating Arizona or Nevada high school student to attend one of our universities as a science or mathematics major. Rachel, a graduate of Coronado High School, plans to attend the University of Arizona in the fall.

Outstanding Service Award.—Norm Thomas was recognized at the Academy's Annual Business Meeting and Awards Luncheon with the Outstanding Service Award for this year. Thomas served the Academy faithfully as a member of its Board of Governors from 1988-2002. He was a regional Director for those 15 years, longer than any other director has served. Norm shared regular updates on scientific developments from northern Arizona, including Lowell Observatory and NAU, in the ANAS newsletter. Thomas is noted professionally for his work at the observatory with the blink comparator. He and colleague Robert Burnham worked together at Lowell for years on a meticulous proper motion survey of the northern hemisphere. During his career, Norm discovered a number of asteroids, including the Apollo asteroids 4544 Xanthus and 4581 Asclepius and the Amor asteroid 3352 McAuliffe.



Norm Thomas

Aregai Tecle, continued

(2) conflict resolution/management in an African context. Tremendous efforts have already been made on these topics, especially in connection with activities of the United Nations, Africa Union, and some regional organizations like IGAD as well as academic and research institutions. Dr. Tecle hopes to work toward making the results of this work more practical and applicable.

At Addis Ababa University, Dr. Tecle teaches in the Environmental Sciences graduate program. He is teaching a course, ENSC 731 Urban Environmental Systems Analysis, and advising/mentoring two graduate students with their required one-credit hour independent study for the semester. Dr. Tecle is also working as a thesis advisor for five other students. Hopefully, they will finish their theses during the time he is at Addis Ababa University.

In addition, he is helping the Environmental Science faculty to develop a proposal for a new Ph.D. program as well as expand their Master's degree options. He is putting together two new courses for the revised Master's program and two courses for the doctoral curriculum.

Dr. Tecle had written syllabi for two courses and was ready to teach those upon his arrival in Addis Ababa. Unfortunately, those courses were not part of the university's offerings. Unfazed, Dr. Tecle simply picked up one of several unstaffed classes and designed the course from scratch. Dr. Tecle says "It is a very interesting one and I am actually enjoying teaching it while also learning a lot myself." Dr. Tecle also says that "the graduate students here are very respectful and courteous, but most importantly very hard working in spite of shortage of books and other teaching materials. They are very

appreciative when one makes a lot of efforts to make the course interesting."

On his sabbatical Dr. Tecle is accompanied by his wife, Negisti and his youngest son Joe. Mrs. Tecle is meeting new people, making friends and helping Joe. Joe is attending seventh grade at an international school run and primarily staffed by Americans. In fact, the school was known as the American School until few years ago, when it became one of a network of schools scattered around the world offering an International Baccalaureate (IB) program. Joe is doing fine in school. What else would one expect with a father like Aregai!

"The graduate students here are very respectful and courteous, but most importantly very hard working in spite of shortage of books and other teaching materials. They are very appreciative when one makes a lot of efforts to make the course interesting."

As far as Ethiopia is concerned, the country is in the midst of a building frenzy. Many cities and towns including Addis Ababa, the capital, are visibly under reconstruction. Dr. Tecle reports that "construction of buildings and roads is everywhere and a lot of the people we meet seem to appreciate the situation. However, there is some inflation, which in many ways seems to impact life in

the country. In spite of that there is no shortage of food in the cities even though we do hear of famine due to drought in some parts of the country." He goes on to say that it is his feeling that "many parts of Ethiopia have plenty of water, and the country can do better in utilizing this resource to modernize agriculture. Where accessibility to surface water is expensive or cumbersome at the moment, they ought to use groundwater and develop more irrigated agriculture. The country has tremendous potential not only to feed itself but also to support the entire East Africa. If things go the way it is doing at the moment, it won't be long before that is realized. However, as in many other African countries it needs is peace to achieve its economic independence."

Congratulations to our newly elected board members!!

President Elect

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Posting: ANAS officers needed!

- Nevada Area Director
- Northern Arizona Director
- Central Arizona Director
- Director at Large

Science Fun Fact

Camels were once an experimentally introduced species to Arizona from Syria in 1856. "Hi Jolly", later known as Philip Tedro, led a herd of 77 camels hired by the US Army through the desert near present-day Quartzsite until the Civil War prevented federal funding for the project. His other business attempts failed, and Hi Jolly was forced to release his camels into the wild; the last camel sighting in North America was in 1946. According to legend, Hi Jolly searched for his camels until his death in 1902. His pyramid-shaped grave is now a tourist attraction in Quartzsite, but locals say that Hi Jolly's spirit still roams the sand dunes, trying to locate his beloved animals.

IMPORTANT!



Complete archives of JANAS are now available online through BioOne and JSTOR. Current members without institutional access to these online services should contact Membership Secretary, Pam Marshall, for the password.



ANAS SCIENCE PUZZLE

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Unscramble each of the clue words.

Take the letters that appear in  boxes and unscramble them for the final message. **Look for the answer in the next ANAS newsletter.**

NAME THAT SPECIES



E-mail your guess in binomial nomenclature to the editor with the heading "NAME THAT SPECIES". The scientist with the first correct answer will be announced in the next newsletter. Good luck!!

President's Corner, continued from page 1

time and to break out of the mold of recruiting those we know we depend on you in the membership to step forward and volunteer to serve in leadership positions. The current Board of Governors is an exceedingly dedicated bunch, but it would be healthy if we can broaden the fields represented.

In evolutionary biology it has long been recognized that low diversity ecosystems cannot cope with change as well as those with high diversity. I believe the same applies to us. It is difficult to predict change, but steps may be taken to insure that the Academy is in the best possible position to cope with the future. While our

limited diversity is currently a weakness, it is also our greatest potential for growth and stability. I have taken it as my personal goal to recruit individuals to organize new sections at our annual meeting. Some of these sections may represent emerging fields. I hope you will join me in my efforts to expand membership.

Last of all, let me welcome and commend our newsletter editor, Theo Manno. We expect great things from him. And let me also thank all the members, presenters, and sponsors that made our meeting such a success.

Robert McCord, President, ANAS
Robert.mccord@mesaaz.gov



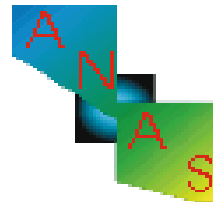
Robert McCord (left) with "Best Student Paper" winner Rickey Bartlett at April meeting



Equipped with his five senses, man explores the universe around him and calls the adventure Science. ~Edwin Powell Hubble, *The Nature of Science*, 1954

Theodore G. Manno, Ph.D.
 editor

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Member: Arizona-Nevada Academy of Science

Invitation for submissions to ANAS newsletter

ANAS members are encouraged to submit materials for publication in the newsletter, including but not limited to the following: articles for the 'Where are they now?' column, ANAS announcements, digital photographs (including suggestions for the 'name that species' section), shout-outs, and special event notifications. The newsletter editor will select the photos used from among those submitted.

Note from the editor

Please feel free to send comments or questions about the ANAS newsletter!—Theo (snuggysquirrel@yahoo.com)

Thanks to Florence Slater, Boris Poff, Karen Conzelman, and Robert McCord for the pictures appearing in this issue.