

SAN DIEGO ASSOCIATION OF GEOLOGISTS

www.sandiegogeologists.org

SDAG HOLIDAY MEETING ANNOUNCEMENT

TUESDAY, DECEMBER 17, 2013

DISCOVERY OF REMAINS OF AN EXTINCT GIANT BISON (*BISON LATIFRONS*) IN PLEISTOCENE (RANCHOLABREAN) FLUVIAL STRATA IN THE SAN LUIS REY RIVER VALLEY, SAN DIEGO COUNTY, CALIFORNIA, USA

Presented by

Dr. Tom Démeré San Diego Natural History Museum

Where: San Diego Natural History Museum

1788 El Prado, San Diego, 92101

When: 6:00 pm – Social Hour

7:00 pm – Dinner 8:00 pm – Program

Dinner: Deluxe Mexican Buffet. Cash bar.

Cost: \$35 per person, \$5 discount for members, STUDENTS: \$25. Add \$5 if you did

not make a reservation. ***Drinks are not included***

Reservations: Make your reservation <u>online</u> at <u>www.sandiegogeologists.org</u> no later than noon, Monday, December 16th.

RESERVATIONS CANNOT BE GUARANTEED AFTER MONDAY AT 12 NOON BUT THEY ARE ALWAYS PREFERRED OVER WALK-INS



SPEAKER BIO

Thomas A. Deméré, Ph.D.

Tom attended San Diego State University (BS Geology), Univ. So. Calif. (MS Geology) and UCLA (Ph.D. Biology). After an initial period working in the petroleum industry, Tom moved to the San Diego Natural History Museum where he has been employed since 1979. He is currently Curator of the Department of Paleontology, where he occupies the Joshua L. Baily, Jr. Chair of Paleontology. Tom's research interests are in Cenozoic paleontology and geology of Southern California and Baja California. His invertebrate paleontological work has concentrated on Plio-Pleistocene molluscan biostratigraphy, paleoecology, and taphonomy. His vertebrate paleontological work focuses on the evolutionary history of marine mammals (pinnipeds and cetaceans). In pursuing this line of research Tom is involved with field investigations to discover new fossils of pinnipeds and cetaceans, with anatomical investigations of both fossil and Recent marine mammals, and with functional analysis of feeding and locomotor anatomical features.

Since the early 1980s, Tom has been deeply involved with conservation of the rich and unique paleontological resources of Southern California. In this regard, he has helped put together guidelines for determining the paleontological resource sensitivity of geological deposits that occur in the region. Tom has also headed up the Museum's Department of PaleoServices, whose goal it is to mitigate negative construction-related impacts to sensitive paleontological resources. Typically, mitigation involves monitoring of construction activities, discovery and salvaged of unearthed fossil remains, preparation of salvaged fossils, identification and curation of prepared fossils, and storage of curated fossils in perpetuity for future generations. Over the past 33 years this effort has resulted in the recovery of countless rare and/or unique fossil remains, many of which are, or have been, displayed for the public at the Museum.

As an adjunct faculty at nearby SDSU in both the Department of Geological Sciences and Department of Biology, Tom has had the opportunity to advise a number of undergraduate and graduate students on various paleontological projects. Tom's involvement with students increased in 2009 when he began teaching courses (Geobiology and Historical Geology) in the Department of Geological Sciences, where he was an undergraduate student in the 1970s.

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SDAG MEETING SCHEDULE - Mark Your Calendars!

Meetings are usually on the 3rd Wednesday of the month but may change to accommodate speaker and meeting place schedules. Check here for updates.

January 15, 2014	TBD
February 19, 2014	TBD
March 19, 2013	TBD

2013 EXECUTIVE COMMITTEE

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PRESIDENT'S CORNER

Happy Holidays SDAGers!

This is my final letter from the President's Corner. It has been my privilege to represent this organization as an officer, and I thank all of you for your support through these years.

The best part of this experience has been getting to know and work with some amazing people. Special thanks go to the following:

Diane and Monte Murbach: you two are the backbone of SDAG. This wonderful organization would not exist without the both of you.

Greg Cranham: the man with the kegs. What would we do without you?

Anne Sturz: your support and advice have been so important to me.

Dave Bloom: the solver of the most difficult problems. The 2012 guidebook would not exist without you!

Mike Hart: the man who ensures that common sense prevails...

Lowell and Diana Lindsey: our guides through the turbulent publication process.

Phil Farquharson: for having every cord ever made. There are more than a few presentations that would not have happened without you!

The 2013 SDAG speakers: we have had wonderfully informative presentations this year. Thank you for volunteering your time and expertise to our geological family.

Brian, Jen, and Lee: the future is bright!

My husband Dan: for being extremely patient and only making fun of me occasionally. I love you.

Happy Holidays,

Cari Gomes 2013 SDAG President

GEOLOGY PHOTOS OF THE MONTH - 2013 SDAG FIELD TRIP



Observing landslide features in the distance



Inside the Oceanview Mine



Specimens from the Oceanview Mine



Tommy Lopez with aquamarine at the Oceanview Mine



Artifacts from the Molpa Archaeological site



Metates at the Molpa Archaological site

ANNOUNCEMENTS

CONGRATULATIONS 2013 SDAG SCHOLARSHIP RECIPIENTS! Scholarships will be presented at the December Holiday Meeting.

Luke Weidman, San Diego State University undergraduate, is working in the village of Sepanjang in Kaaranganyar, Tawamangu, Central Java, Indonesia. This area is the study site for a landslide mitigation based project that focused on the improvement of landslide education for the village and creating an up to date field map that provided the village with locations and descriptions of areas of high and low landslide potential, evacuation routes, and general meeting areas.

Cornelius Harris, University of San Diego undergraduate, is working on the geogenic concentrations of metals in the Bay Point Formation. Over the past 2 years, he collected data from multiple remediation sites throughout downtown San Diego. He has filtered through thousands of sample results to locate undisturbed (in situ) samples with no anthropogenic signatures. Then, he processed this geogenic data, ran statistical analyses, and uploaded the results on to a GIS database. The results of this study will have regulatory implications because the arsenic concentrations are above the current health risk screening criteria used by the EPA.

Brian Rockwell, San Diego State University graduate student, is working on the Clark strand of the San Jacinto fault zone, in which he applies non-central principal component analysis, a relatively new statistical methodology, to analyze geochemical data within the fault zone architecture. These data show a linear alteration trend with increasing alteration into the fault core, in which 99.7% of the data spread is explained by PC1. He also calculates translation invariant alteration intensity values for each architectural zone based on the linear alteration trend. Additionally, he provides a clay mineralogical analysis of each architectural zone, which corresponds to the alteration intensity trends derived from non-central PCA. The clay mineralogical analysis shows complete alteration to illite in the fault core from mixed layer illite/smectite in the damage and transition zones, evident of fluid-related temperature elevation of ≥125 °C concentrated within the fault core.

CALL FOR PAPERS - SDAG 2014 FIELD TRIP

"Traversing a Transform Boundary – Regional Tectonics, San Diego to the Salton Trough" October 10 – 12, 2014

On this field trip we will explore the interaction of the major faults of Southern California to accommodate for motion between the Pacific and North American Plates. We will consider the tectonic evolution of the region and observe resulting landforms.

SDAG seeks new manuscripts based on original work relating to regional tectonics, from the San Andreas Fault through the continental borderland. We also invite authors to submit articles on the history of the region as it relates to tectonics and resulting landforms.

Deadline for Abstracts: Friday, May 16th, 2014

Please submit the following information along with abstracts:

- Title
- Author(s) and affiliation
- Address, email, and telephone numbers for the author(s)

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Please submit abstracts by email to Jennifer Morton geologyjen@yahoo.com

SCIENCE OLYMPIAD VOLUNTEERS NEEDED! Marshall Middle School's Science Olympiad Team is seeking volunteers to help students with the Rocks and Minerals portion of the competition. The team meets Wednesday evenings at Marshall Middle School in Scripps Ranch. The Science Olympiad is a national science competition for middle school students; this year's competition will be held on February 8th, 2014. If interested, please contact Christopher Casper, ckasper@qualcomm.com For more information on the Science Olympiad please visit the following websites:

http://www.soinc.org/

http://www.soinc.org/rocks minerals b

CALL FOR ARTICLES! SDAG invites members to submit articles on their current research or an interesting project they are working on for publication in the monthly newsletter. The article should be no more than 1 page in length. Photos are welcomed, too Please submit articles to the SDAG secretary via email.

CALL FOR PHOTOS! SDAG invites members to submit photographs of an interesting geologic feature for publication in a new section of the newsletter – "Photo of the Month". Please submit your photo along with a caption to the SDAG secretary via email.

SDAG RESEARCH TOOL A comprehensive listing of all papers published by SDAG, whether as annual field trip guidebooks or special publications, is now available on our website. Entries are sorted by primary author, or chronologically by date of publication, from our first guidebook in 1972 (40 years ago) to all things Picacho in 2011. These can be accessed or downloaded as .pdf files. They are fully searchable in Adobe Reader or Acrobat, so if you are researching a topic, "tsunami" for example, you can search for that keyword. This listing will be updated as new books are published. Thanks to Greg Peterson and Hargis + Associates, Inc., for making this possible. See the links below:

http://www.sandiegogeologists.org/SDAG_Pubs_authors.pdf

http://www.sandiegogeologists.org/SDAG_Pubs_chronological.pdf

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JOB OPENINGS

Position: Project Geologist/Engineer (Environmental)

Location: San Diego, California (no relocation allowance available)

Duration: Full Time

Salary: Dependent upon qualifications

TriEco, LLC is seeking a Project Environmental Geologist or Project Environmental Engineer to support its Naval Facilities Engineering Command Southwest (NAVFAC SW) and U.S. Army Corps of Engineers (USACE) contract work within California and other western U.S. locations. The qualified candidate will be based in our San Diego office and report directly to TriEco's Program and Operations Managers.

The Project Geologist or Project Engineer shall be responsible for estimating, planning, and executing environmental consulting work under CERCLA, RCRA, MRP, UST, and Compliance programs. Scope includes Site Inspections, Remedial Investigations, Feasibility Studies, Proposed Plans, and Records of Decision. The job position will require management of multiple task orders. Typical duties include managing staff resources, budget, schedule, procurement/subcontractor oversight, tracking and reporting progress, and technical report writing. It is anticipated that the job position may also require up to 40% field time supervising and performing field work on an as-needed basis.

Skills and Experience: The ideal candidate shall have the following skills and experience:

- 5 years or more years experience managing and executing environmental projects.
- Experience with Navy and/or USACE environmental work is highly desired.
- Skilled in environmental field work, including soil and groundwater sampling, well installation, soil gas sampling, etc.
- Familiar with human health and ecological risk assessments.
- Familiar with FS preparation and innovative remediation technologies.
- Excellent technical writing, editing, and communications skills.
- Proficient in MS Word, Excel, Powerpoint, and Project scheduling.

Education and Registration:

- Bachelor's or high degree in Geosciences or Civil Engineering
- Registration in California as a Professional Geologist or Professional Engineer, or ability to obtain registration/license in 12 months.

If interested, please send a copy of your current resume and cover letter, if desired, to s.arnzen@trieco.net.

TriEco, LLC is a U.S. Small Business Administration (SBA) certified firm specializing in environmental consulting services to meet customer needs and federal, state and local requirements. We provide innovative, comprehensive architect/engineer and remediation services and products for both private sector and government sections throughout the U.S. TriEco is currently engaged in a joint venture partner ships with Tetra Tech, Inc. supporting Department of Defense contracts and customers. Visit us at www.trieco.net for more information.

JOB OPENINGS

Position: Staff Geologist/Engineer (Environmental)

Location: San Diego, California (no relocation allowance available)

Duration: Full Time

Salary: Dependent upon qualifications

TriEco, LLC is seeking a Staff Geologist or Staff Engineer to support its Naval Facilities Engineering Command Southwest (NAVFAC SW) and U.S. Army Corps of Engineers (USACE) contract work within California and other western U.S. locations. The qualified candidate will be based in our San Diego office and report directly to TriEco's Program and Operations Managers.

The Staff Geologist or Staff Engineer shall support project and senior-level professionals in planning and executing environmental consulting work under CERCLA, RCRA, MRP, UST, and Compliance programs. Scope includes Site Inspections, Remedial Investigations, Feasibility Studies, Proposed Plans, and Records of Decision. The job position will require approximately 50 to 75% field time performing field work, providing health and safety support, and overseeing subcontractors. Office duties include supporting proposal efforts, preparing work plans (WPs), sampling and analysis plans (SAPs), Health and Safety Plans, analyzing and interpreting environmental and laboratory chemical data, and preparing small technical reports and portions of large reports.

Skills and Experience: The ideal candidate shall have the following skills and experience:

- 2 or more year's field and office experience executing environmental projects.
- Experience with Navy and/or USACE environmental work is highly desired.
- Skilled in environmental field work, including soil and groundwater sampling, well installation, soil gas sampling, QA/QC procedures, etc.
- Excellent technical writing, editing, and communications skills.
- Proficient in MS Word, Excel, Powerpoint, and Project scheduling.
- Familiarity with human health and ecological risk assessments, and FS preparation is also a plus.

Education and Registration:

- Bachelor's or higher degree in Geosciences or Civil Engineering
- Registration in California as a Professional Geologist or Professional Engineer, or ability to obtain registration in two years is preferred.

If interested, please send a copy of your current resume and cover letter, if desired, to s.arnzen@trieco.net.

TriEco, LLC is a U.S. Small Business Administration (SBA) certified firm specializing in environmental consulting services to meet customer needs and federal, state and local requirements. We provide innovative, comprehensive architect/engineer and remediation services and products for both private sector and government sections throughout the U.S. TriEco is

currently engaged in a joint venture partner ships with Tetra Tech, Inc. supporting Department of Defense contracts and customers. Visit us at www.trieco.net for more information.

JOB OPENINGS

de maximis, inc., a nationwide firm specializing in project coordination, currently has opportunities for contract employees to provide services in Ecuador. We currently have an opportunity to provide these services and it is our understanding that there are several positions available. We understand that the initial assignment is 1 year. At least one position will require full time presence in Ecuador and the other positions could be done on a rotational basis. Strong spanish skills are essential as well as 3 to 10 years of professional experience. Work assignments and logistics will be handled from domestic de maximis offices.

Project Staff and Project Managers: Candidates would have a B.S. Degree in Environmental Science with either an Engineering or Geology degree as a plus. Candidate should have 3 to 10 years relevant experience in the environmental consulting industry. Candidates needs to have demonstrated site investigation knowledge, work plan and report preparation, task management, cost estimating and scheduling experience. The candidates should be detail oriented and have excellent verbal and written communication skills. Professional Geologist or Engineer or ability to obtain within two years, and Masters degree is a plus. Positions will be based in Ecuador (initially), and will require travel and field work.

de maximis, inc. offers competitive salaries and benefits, and a challenging work atmosphere. To learn more visit our website at: www.demaximis.com.

No phone calls. Qualified candidates should send resumes, along with a cover letter summarizing experience and salary requirements to:

de maximis, inc. Attention: Jack Keener 1322 Scott St, Suite 104 San Diego, CA 92106 jkeener@demaximis.com

and,

Steve Myers de maximis, inc.
Albany, New York
smyers@demaximis.com

SEEKING JOB OPPORTUNITIES

Geological Engineer: I am an outgoing and enthusiastic geologic engineer with several years experience working on geological field projects, writing technical reports, and completing rigorous data analysis on large and complex data sets. Through my experience I have developed the ability to think critically, learn quickly, and communicate exceptionally both at the technical and non-technical level. I am an MS graduate with a degree in geological engineering from South Dakota School of Mines and Technology. I have 3 years of experience doing geotechnical investigations, geochemical assessments, and groundwater modeling at compromised sites and underground environments. Detailed work experience, education and more at http://www.linkedin.com/pub/tessa-van-beek/51/46a/272. Email Tessa Van Beek at tessaj@gmail.com for more information.

I am a recent MS graduate in Geological Sciences, Hydrogeology from SDSU looking to work in hydrogeology, water resources, or natural resources management. My thesis was a study involving groundwater modeling. Additionally, I have eight years of local experience in environmental consulting. Please contact Cheryl Martin (Johnson) at cheryl_k_johnson@yahoo.com or call me at (619)-992-9335.

Qualifications Summary and Objective: I have 14 years experience directing surface water quality monitoring programs with a proven record of excelling in monitoring plan implementation, quality control, public notification and continuous improvement in operational effectiveness and efficiency. I have built and maintained relationships with key staff in academia, industry, and all levels of government in San Diego and California. I have a widely applicable skill set which includes: analytical thinking, communication and writing skills, data analysis and management, inter and intraagency project coordination, and staff supervision and training. My objective is to obtain a career position with an industry leader where I can contribute my skills to build the success of my employer as well grow professionally. Detailed work experience, education and more at www.linkedin.com/in/cbclifton2010. Email cbc2006@cox.net or 619-964-1776.

Contact: Clay Clifton

ENGINEERING GEOLOGIST- California PG, MS Geology, over 13 years of applied geotechnical experience, proficient in geotechnical investigations, hazard evaluations, geophysical surveys, construction management and quality control, engineering analyses, special interest in earthquake-hazard and seismic design related applications, strong problem-solving and organizational skills. Detailed resume upon request: Anna, 201-407-7461, Afyodorova103@gmail.com

ENTRY-LEVEL ENVIRONMENTAL SCIENTIST - I am a recent UCSB graduate with a double major in Environmental Studies (BS) and Geology (BS, Earth Systems emphasis) who is looking to begin a career in environmental consulting. I have prior lab experience in both professional and academic settings. I am looking to establish myself with a passionate and hard working environmental firm in the San Diego region. For further information about my credentials and work experience please contact Georgi Chertkov at georgichertkov@gmail.com or call me at 505-412-3107.

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Request for Sponsors: 2013 SDAG/SDGS and Publication SPONSORS

On behalf of the San Diego Geological Society, Inc. (SDGS), a public benefit 501(c)3 nonprofit educational corporation, we would like to request tax deductible Donations at our San Diego Association of Geologists (SDAG). The list of paid Sponsors and the forms to become a Sponsor are located on the SDAG web site at: http://www.sandiegogeologists.org/Sponsors.html. Your donation will further the SDGS mission to promote geology and related fields in the greater San Diego region, operating through the San Diego Association of Geologists (SDAG), a committee of SDGS. To achieve our primary educational objective, we organize frequent field trips and maintain a program of monthly meetings featuring speakers on current geological topics. We also publish field trip guidebooks and other publications related to geology and natural history. We encourage scholarship and research by awarding scholarships from the elementary through graduate levels. With your \$100 "EMERALD" donation, your name/business will be listed as a sponsor on the SDAG web site (http://www.sandiegogeologists.org/) and in the monthly SDAG meeting newsletters. With your \$500 "RUBY" or \$1,000 or more "DIAMOND" level donation, your business card will also be included on the SDAG web site and in the monthly SDAG meeting newsletters. In addition, as a "\$1,000 or more DIAMOND" level donation you will be presented with a thank you plaque. Should you have any questions regarding a Sponsorship, please contact our non-profit SDGS Secretary (Diane Murbach) at 619-865-4333. ******

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Contact: Louise Adams or Suzie Nawikas



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Contact: Dave Bloom



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http://www.missiongeoscience.com/

Contact: Jim Ashby



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