



# SAN DIEGO ASSOCIATION OF GEOLOGISTS

[www.sandiegoeologists.org](http://www.sandiegoeologists.org)

## SDAG MEETING ANNOUNCEMENT

WEDNESDAY, DECEMBER 16<sup>th</sup>, 2009

### *The Bay Point Formation in the East Village*

*Presented by*

**Thomas A. Deméré, Ph.D.**  
**Curator of Paleontology**  
**San Diego Natural History Museum**

**Where:** San Diego Natural History Museum (<http://www.sdnhm.org>)  
1788 El Prado, Balboa Park  
San Diego, CA 92101

**When:** 6:00 doors open  
6:30 Dinner  
7:45-9:00 Announcements and Presentation  
9:15 Last Call

*Note: The museum will be closed to all visitors at 5 pm and will open at 6 pm for our event. We will have the run of the museum and many of the exhibits will be open, including Fossil Mysteries.*

**Directions:** The museum is located in Balboa Park, near the intersection of Park Boulevard and Village Place, just south of the San Diego Zoo.

**Dinner:** We have a great selection of food from a top caterer, Culinary Concepts. They have been catering in San Diego for over 20 years and were voted one of the top 5 caterers in 2009. They will be providing beef au poivre (tender beef tips with green peppercorn sauce), slow roasted chicken marinated in fresh rosemary, (for the vegetarian option we have Florentine stuffed shells) garlic Yukon mashed potatoes, basmati rice, mixed green salad, basil and tomato salad, rolls and butter, and some awesome mixed desserts.

**Beverages:** Stone Brewing Company has graciously donated several cases of beer. Red and white wine come from the SouthCoast Winery in Temecula. Sodas and water will also be provided. There will be a bartender to provide drinks, but all drinks are complimentary!

**Cost:** \$30 per person, \$5 discount for members, STUDENTS: \$20. Add \$5 if you did not make a reservation

**Reservations:** Make your reservation online at [www.sandiegoeologists.org](http://www.sandiegoeologists.org) **no later than noon, Monday, December 14<sup>th</sup>.**

**RESERVATIONS CANNOT BE ACCEPTED AFTER MONDAY AT 12 NOON.  
IF YOU DO NOT MAKE A RESERVATION, WE CANNOT GUARANTEE YOU A MEAL.**

## 2010 SDAG MEETING SCHEDULE - see the President's corner below...

### 2009 EXECUTIVE COMMITTEE

**PRESIDENT** – Scott Snyder; *Ninyo & Moore*; Ph: (858) 576-1000; [sdag2006@prodigy.net](mailto:sdag2006@prodigy.net)

**VICE PRESIDENT** – Bryan Miller-Hicks; *Cuyamaca College*; Ph: (619) 733-3724 [geobry@aol.com](mailto:geobry@aol.com) ; [bryanmillerhicks@gmail.com](mailto:bryanmillerhicks@gmail.com)

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### Tom Demere Biographical Sketch:

Tom has worked for the Museum since 1979. His academic history includes: SDSU - B.S. Geology; USC - M.S. Geology; UCLA - Ph.D. Evolutionary Biology. His current research focuses on the evolutionary history of baleen whales. As Curator of Paleontology, Dr. Deméré has occupied the Joshua L. Baily, Jr. Chair of Paleontology at the Museum since 1994. Tom's research focuses on the evolutionary history and paleobiology of pinnipeds and cetaceans. He is also keenly interested in the geology and paleontology of southern California and Baja California and has published numerous scientific and popular articles on these subjects.

Tom also serves as Director of PaleoServices, a consulting arm of the BRCC that provides paleontological resource assessment and impact mitigation services to public and private developers. This work has been responsible for the discovery, salvage, and conservation of thousands of significant fossils from construction sites in San Diego, Orange, and Riverside counties.

### The Bay Point Formation in the East Village

#### Pleistocene marine transgressions and regressions, gray whales and mammoths, and mollusks and horses in downtown San Diego

Pleistocene marine and non-marine sedimentary rocks temporarily exposed in deep excavations in downtown San Diego preserve a complex record of transgressive and regressive facies that may be broadly correlative with global cycles of interglacial and glacial events. Although recent geologic mapping has adopted an informal stratigraphic nomenclature for these local Pleistocene deposits (e.g., Qvop6), the traditional formal stratigraphic name, Bay Point Formation, is retained here.

In February 2009, basement excavations for the new downtown campus of the Thomas Jefferson School of Law (north half of city block bounded by Island Avenue, 11th Avenue, 12th Avenue, and J Street) exposed over 40 feet of Quaternary strata. The upper 15 feet of section represents a fluvial, non-marine facies of probable Holocene age, while the lower 25 feet consists of Pleistocene marine and non-marine strata of the Bay Point Formation. A shell bed near the top of the Bay Point Formation is correlative with the Broadway Faunal Horizon as recognized in the subsurface of downtown San Diego, as well as in surface exposures in Logan Heights and Loma Portal. A sandstone stratum overlying the Broadway Faunal Horizon shell bed produced a partial skeleton (skull, lower jaw, molars, tusks, vertebrae, and forelimb bones) of a mammoth, tentatively identified as *Mammuthus meridionalis*. A planar and trough cross-bedded sandstone unit underlying the shell bed produced scattered fossil remains of horse (*Equus* sp. and other currently unidentified land mammals). Underlying the cross-bedded sandstone unit is a stratum of muddy sandstone containing fossils of estuarine mollusks (*Cerithidea* sp. and *Tellina* sp.) and marine vertebrates (sharks and rays). This estuarine sandstone in turn overlies a paleosol unit developed on coarse-

grained marine sandstones that produced a partial skeleton (disarticulated skull, lower jaw, vertebrae, ribs, and forelimb) of a gray whale, *Eschrichtius robustus*, as well as isolated bones and teeth of sharks, rays, and bony fish. Below the whale-bearing sandstone unit are at least two additional marine units separated by another non-marine stratum.

Preliminary analysis recognizes possibly four transgressive-regressive cycles, which may correlate with global late Pleistocene (~180,000 and 500,000 years ago) glacial-interglacial couplets associated with Oxygen Isotope Stages 6-7, 8-9, 10-11, and 12-13. The occurrence of *Mammuthus meridionalis* in the youngest transgressive-regressive cycle at the Thomas Jefferson School of Law site is significant, as this species of mammoth is hypothesized to have dispersed from Asia to North America approximately 1.8 million years ago, becoming extinct ~200,000 years ago at a time correlative with OIS 7.

### President's Corner, December 2009

This is it folks, the last hurrah for me as President! I would like to take this opportunity to thank the membership and the officers of SDAG and SDGS for their support (the best of any group I have ever been a part of) over the last 4 years. I would especially like to thank Dr. Margaret Eggers, who asked me 4 years ago if I would like to run for Secretary. I was nervous, humbled, and excited all at the same time. The Field Trip seemed a daunting task, but it turned out to be the task I enjoyed the most, far and away the most!! I have gotten to know a lot of you, and gotten to know a lot of you better (perhaps more than I'd like sometimes!), but boy it's been a fun ride, and I look forward to many more years with SDAG/SDGS in a supporting role. From the bottom of my heart, thank you all again very much for your support and encouragement, and the chance to give back to a great profession.

Let's welcome Bryan Miller-Hicks as the Prez in waiting. Bryan did a great job organizing the field trip and will do well this coming year, with the continued support of many, just like I did.

Speaking of the field trip, it was a great event with over 40 SDAG members and others trekking again into the San Jacinto/Santa Rosa Mountains. The trip was led by Bryan Miller-Hicks, Dr. Monte-the Terrible-Marshall, and Dr. Bradley Erskine. Field trip photos can be found at [Kodak Gallery](#) Friday was a great day in the field and even more fun back at camp with a fire, food, and drink. We had a great, but all too short, trip into Deep Canyon and Coyote Canyon with spectacular outcrops on Saturday. We hope to return sometime, if we can. Sunday was a great day in Palm Canyon with more spectacular geology. The food was great, drinks were great, and I think we all had a great time. Kudos to all involved for a successful trip. This coming year, the trip will be lead by Chuck Houser into who-knows-where!?

Our January meeting will be highlighted by Dr. Wolf Berger, who will be discussing sea level changes in the region throughout the Pleistocene. February is TBD, but in March, we will see another update on the groundwater studies being done by Wes Danskin's group at the USGS here in San Diego. Should be a great way to start the new year.

Here's hoping you all enjoy a safe and happy holiday season!

*Scott Snyder*, outgoing SDAG-Prez

**THANKS!!**

## 2009 CORPORATE SPONSORS - THANK YOU!!

Corporate sponsors provide a significant portion of SDAG's operating and scholarship budget. In addition to monthly recognition for your contribution, you are entitled to a free Internet link from [SDAG's Website](#). We also list Corporate Sponsors in our annual SDAG Field Trip Volume.

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***For the latest developments in the on-going saga of the California Board of Geologists and Geophysicists (BGG), please check the SDAG website...***

## ANNOUNCEMENTS

### SDGS/SDAG

As many of you are aware, the San Diego Geological Society (SDGS) was formed early this year as an official non-profit 501(c)3 corporation, and SDAG is now an organization under this corporation. The reasons for doing this were many and they are spelled out in an informational sheet, the Business Plan of SDGS. The officers of SDGS should be very familiar to you, as they are all past presidents of SDAG, as well as me, Scott Snyder, current SDAG President. For those of you that would like to read more about SDGS and what it means to SDAG, check out the informational page on the website. Also check out the website [www.sandiegogeologicalsociety.org](http://www.sandiegogeologicalsociety.org) (Not to be confused with the San Diego Genealogical Society of course...)

#### Note from our SDAG Editor-in-chief:

From now on please send all correspondence related to SDAG editing to Carole Ziegler via [SDAGeditor@gmail.com](mailto:SDAGeditor@gmail.com) <mailto:SDAGeditor@gmail.com>

This includes any manuscripts, editing questions, etc.

Any SDAG related activities may also be sent to this address for Carole Ziegler. Please send all other correspondence not related to SDAG to [Cactus12Carole@gmail.com](mailto:Cactus12Carole@gmail.com) <mailto:Cactus12Carole@gmail.com>