

SAN DIEGO ASSOCIATION OF GEOLOGISTS

<http://www.sandiegoeologists.org/>

PRESIDENT

John Teasley
(760) 908-7740
itea@cox.net

VICE PRESIDENT

Heather Reynolds
(540) 525-6475
heath88@vt.edu

SECRETARY

Neil Seitz
(419) 330-9511
neilseitz@hotmail.com

TREASURER

Tina Zeidan
(661) 733-9548
zeidan.tina@gmail.com

WEBMASTER: Carolyn Glockhoff carolyn@caro-lion.com

SDAG MEETING ANNOUNCEMENT

Wednesday, December 18th, 2024

Where: San Diego Natural
History Museum
Balboa Park
1788 El Prado
San Diego, CA 92101

When: 6:00 pm - Social Hour
7:00 pm - Dinner
7:45 pm - Awards & Tour

Dinner: Mexican Buffet / Vegan from [The Craft Taco at SOVA](#)

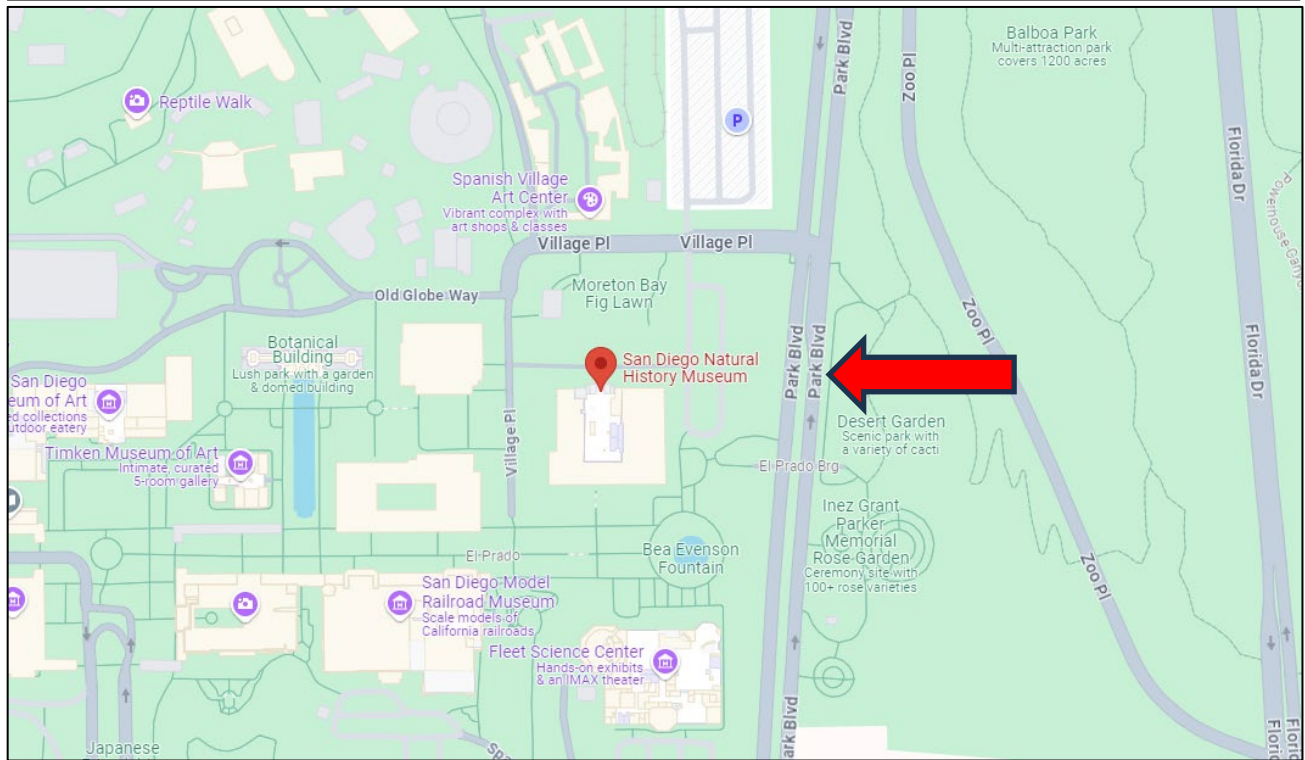
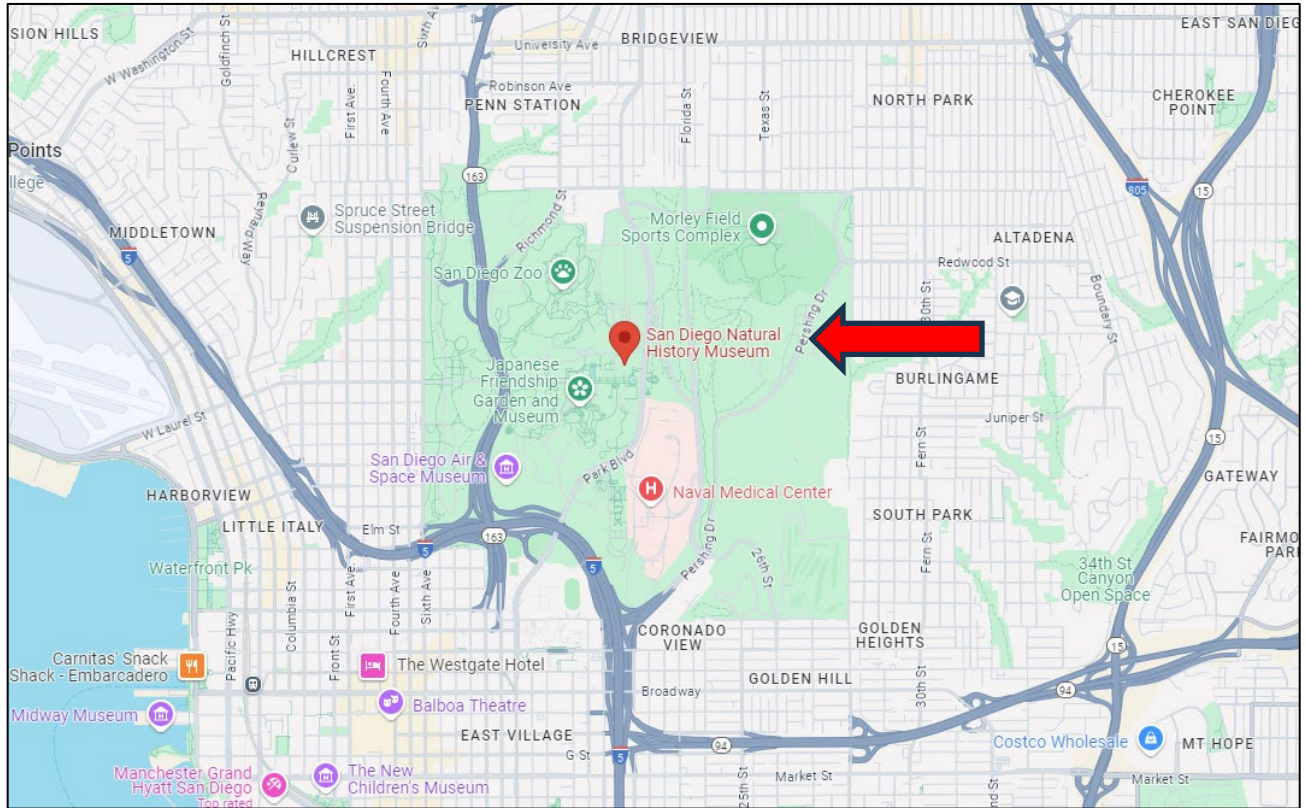
Cost: \$65.00 Member; Non-Member \$75.00; Student \$35.00
Cashless No Host Bar (Use Credit or Debit Cards Only)

Reservations: Make/Pay your reservation [online](#) through the SDAG website, by **NOON MONDAY, DECEMBER 16TH**. (*Please note beginning January 2024 all meeting reservations will require online pre-payment due to venue costs, venue contracts, and loss of money due to no shows.*)

Speaker: Dr. Tom Deméré

Presentation Description: I thought it would be appropriate for my presentation this year to consist of a guided tour of the new Paleo Center. I will include discussions of noteworthy fossil specimens, interesting fossil localities, novel geological interpretations based on regional paleontological discoveries, and future work. It will be a fun challenge to ensure that everyone gets to see and hear about the various functions of the new Paleo Center.

Meeting Location Map:



Directions:

From I-5:

Take PERSHING DRIVE exit. Make a left on FLORIDA DRIVE and then another left on ZOO PLACE. At the top of the hill make a left onto PARK BOULEVARD and then turn right on VILLAGE PLACE. A large parking lot is on the right, the Museum is to the left. The entrance to the Museum is on the north side of the building.

From I-8:

Take the 163 SOUTH and exit PARK BOULEVARD.

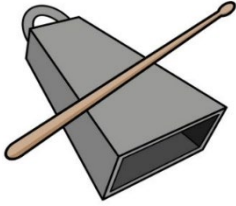
Turn left and head north for 0.9 miles. Turn left on VILLAGE PLACE. A large parking lot is on the right, the Museum is to the left. The entrance to the Museum is on the north side of the building.

Speaker: Dr. Tom Deméré



Bio: Tom Deméré attended San Diego State University (B.S., Geology), University of Southern California (M.S., Geology), and University of California Los Angeles (Ph.D., Evolutionary Biology) and has worked at the San Diego Natural History Museum since 1979, where he is Curator of Paleontology. Dr. Deméré is the author of numerous scientific and popular articles dealing with the paleontological history of southern California and the evolutionary history of marine mammals. Tom also serves as Director of the Museum's Department of PaleoServices, which provides paleontological assessment and mitigation services throughout the greater southern California region. The efforts of PaleoServices have resulted in the discovery and recovery of thousands of fossil specimens that now reside in the Museum's research collections and public displays.

In 2024, the paleontological center was moved from the 3rd floor to the basement, and named "Below Grade: The Tom Deméré Paleontology Collection."



President's Cowbell Corner

2024 has been quite the year. Thank you to all the wonderful speakers that volunteered to give presentations to us at our monthly meetings, it was a pleasure to meet and work with all of you. November's joint meeting with the Association of Engineering Geologists was a very good time, with the Fallbrook Gem & Mineral Society's Museum and Gift Shop staying open for the midweek meeting. We hope to have more joint meetings with the AEG again and will continue to have our annual joint meeting with the South Coast Geological Society in June as well.

In spite of all the highlights of 2024, unfortunately our annual Fall field trip had to be postponed due to fires and closures of roads in our destinations in the Wrightwood area. Heather is working to have the field trip next Fall to examine even greater exposures of the San Andreas Fault Zone in that area with leaders Miles Kenney and Monte Marshall.

December's meeting will be an extra-special gathering at the San Diego Museum of Natural History to celebrate their 150th Anniversary year. This time though, Tom Deméré will give us a guided tour of the new Paleontological Center.

From the SD Union-Tribune 10/6/24, Section E:

The relocated and revitalized center excites paleontologists like Deméré, not only for its state-of-the-art technology and work spaces, but also for its convenience.

Deméré, who has worked at the museum for 45 years, said the museum's fossil collection showed a marked increase amid San Diego County's accelerated industrialization in the 1990s and early 2000s. The California Environmental Quality Act requires developers to involve paleontologists in their builds to identify and recover fossils — a process that has led to many scientific discoveries.

This will be a very fun and special presentation indeed.

Congratulations! Scholarships will be awarded to students Nicholas Oliver, Emily Emperato, and Jordan Jaeger at the meeting.

We will also be voting on 2025's SDAG Officers. We look forward to volunteers to help in the years to come. I will be turning over the President's duties to Heather Reynolds. I am grateful for having the opportunity to serve as President and Vice President the last two years. The experience was very gratifying and allowed me to meet and get to know so many of the members and others that I may never have had the opportunity to otherwise.

Thank you all so much and have a wonderful 2025

- John Teasley

UPCOMING 2024 SDAG MEETINGS

January 15 th , 2024	TBD
February 19 th , 2025	Karl Mueller will give his talk on new work on active faulting in San Diego

ADDITIONAL ITEMS

2024 SDAG SCHOLARSHIP AWARDS

We are proud to announce two SDSU awardees and one USD awardee for the 2024 San Diego Association of Geologists (SDAG) Annual Scholarships: Nicholas Oliver, Emily Imperato & Jordan Jaeger. These 3 Outstanding Student Research Awards were selected by the San Diego Geological Society Inc (SDGS) Board of Directors. These 3 awardees will be presented with the awards during the SDAG program at our December Holiday Celebration. Students accepting awards are requested to give an oral presentation of their research results at our spring dinner meeting scheduled for April 2025.

SDSU Undergraduate Student (\$1,000): Nicholas Oliver. Research Title - *Examination of Middle Cambrian hyolithidans from the Manuels River Formation of Avalonian southeastern Newfoundland.* Supported by: Dr. Rafael Almeida, Assistant Professor & Dr. Jessica H. Whiteside, Chair, Department of Earth and Environmental Sciences, San Diego State University.

SDSU Graduate Student (\$1,500): Emily Imperato. Research Title - *Constraining Natural and Anthropogenic Controls on Base of Freshwater and Underground Source of Drinking Water (USDW) In Central San Joaquin Valley.* Supported by: Dr. Rafael Almeida, Assistant Professor & Dr. Matthew Weingarten, Associate Professor, Department of Earth and Environmental Sciences, San Diego State University.

USD Graduate Student (\$1,500): Jordan Jaeger (Jojo). Research Title - *An investigation into the human health risks of lakebed sediments as a proxy for dust chemistry at the Salton Sea.* Supported by: Dr. Bethany O'Shea, Professor, Environmental and Ocean Sciences Department, University of San Diego.

ANNOUNCEMENT: Seeking volunteers for 2025 SDAG officers. SDAG is seeking officers for the 2025 calendar year. If you or anyone you know is interested, please feel free to reach out to the current officers.

CALL FOR PAPERS: From Past President Jennifer Morton

Hello Geo Community! I am currently working on my Master's degree at SDSU. Part of my thesis will include compiling a geodatabase of investigations on the La Nacion fault system. If anyone has done any trenching or other work on the fault and is willing and able to share the information, I would greatly appreciate it! Thank you and Happy Holidays!

PUBLICATIONS:

Publication Announcement: Todd Wirths, the 2012 SDAG president and current SDGS board member, has co-authored a couple of articles on our local paleontology involving two Eocene marine formations, the Mount Soledad Formation and the Ardath Shale. Hopefully, he will make a presentation (or two) out of it! Below is the Mount Soledad article; both articles can be found online here, at <https://cardinalhaven.wixsite.com/wsm2022>; click on the download instructions and go to page 55 for the Ardath Shale article on the announcement of two new species of bivalves, and page 74 for the complete article on the Mount Soledad Formation.

FIRST REPORT OF MEGAFOSSILS FROM THE TOURMALINE SURFING PARK OUTCROP OF THE EOCENE MOUNT SOLEDAD FORMATION, LA JOLLA, CALIFORNIA, by Todd A. Wirths and N. Scott Rugh

Extended Abstract: Marine invertebrate megafossils from the Eocene Mount Soledad Formation forming the seaside bluff at Tourmaline Surfing Park in La Jolla, San Diego, California (Kennedy and Moore, 1971) were previously unknown. Recent collections made during paleontological mitigation investigations have yielded a marine invertebrate fauna of at least 32 species represented by internal and external molds of mostly bivalve, gastropod, and scaphopod mollusks, as well as at least two species of crustaceans, at least one species of echinoid, and trace fossils. The moderately to well-preserved molds, predominately in siltstone with minor very fine-grained sandstone, exhibit little to no abrasion, with some bivalves still articulated, indicating limited to no post-mortem transport. Individual fossils are generally scattered; no evidence of shell beds or lags was observed.

Bivalves are dominated by multiple specimens of the nuculanids *Nuculana (Saccella) gabbi* Conrad (ms.) of Gabb and *Portlandia rosa* (Hanna), with lesser numbers of *Myrtucina roseburgensis* (Turner), *Periploma eodiscus* Vokes, and *Tellina* sp. aff. *T. vorbei* Hanna. Bivalves represented by intact single specimens include cf. *Modiolus* sp., *Pitar joaquinensis* Vokes, and *Thracia sorrentoensis* Hanna. Fragmentary bivalve specimens include *Callista* sp., aff. *C. domenginica* Vokes and *Pitar uvasanus* (Conrad). Almost all the gastropods consisted of single specimens and include *Natica rosensis* Hanna, *Sinum obliquum* (Gabb), *Cylichnina tantilla* (Anderson and Hanna), and cf. *Phos* sp. Scaphopods are relatively numerous, represented by unidentified species of *Dentalium* and *Cadulus*. Identifiable decapod crustaceans include the ghost shrimps *Vegarthron santiago* Schweitzer and Feldmann and *Neocallichirus rhinos* Schweitzer and Feldmann, and the crab cf. *Palaeopinnixa* sp. The heart urchin *Schizaster diabloensis* Kew is the identifiable echinoderm.

A “Domengine” provincial molluscan “stage” (late early Eocene – early middle Eocene of Squires, 2003) is assignable to the fauna based on the restricted stratigraphic ranges of the bivalves *Portlandia rosa* and *Periploma eodiscus*, and the gastropod *Natica rosensis*; the highest stratigraphic occurrence of *Pitar joaquinensis*; and the lowest stratigraphic occurrence

of *Thracia sorrentoensis* (Givens and Kennedy, 1979; Squires, 2008). The depositional environment for the Tourmaline Surfing Park outcrop of the Mount Soledad Formation has been variously interpreted as submarine fan overbank deposits in a middle to upper continental slope facies (Kies and Abbott, 1982; Link and Abbott, 1991), as an abandoned deep-water channel overlain by a levee complex in a continental slope (May and Warne, 1991; Campion et al., 1996), and most recently as a series of stacked channel deposits within a larger scale submarine slope canyon or valley (Power et al. 2014). The composition of the fauna, in conjunction with the depositional setting, suggests the sediments of the Tourmaline Surfing Park outcrop of the Mount Soledad Formation may be, in part, coeval with the continental shelf deposits of the early middle Eocene Ardath Shale.

Publication Announcement: Based on the interest for the out-of-print 1998 SDAG Book “*Geology and Geothermal Resources of the Imperial and Mexicali Valleys*” this book is now available as a Google E-Book. Due to the age of this book, not having any electronic files, the need to update to color etc... the decision was made to create an e-book from a scan of the book. The link to purchase this book is now live on the SDAG website (Lowell Lindsay's 1998 Geothermal Book!).

Here is the link to the SDAG Publication web page <https://www.sandiegoeologists.org/Publications.html> and a screen shot below showing this E-Book. Thanks for the donated book from the Lindsays, Dave Bloom for scanning the book and posting it on our Google E-Book site, and Carolyn Glockhoff for adding the link to our SDAG Publication page - now this out-of-print book can now be purchased as an e-Book!

ISBN: 9700910201012

-----List Price 1999 \$15.00-----

A concise historical summary of the three massive 20th c water projects for the burgeoning south and trip highlights including four new 21st c projects, three in the Inland Empire: Inland Feeder Tunnel (water transport), Seven Oaks Dam (flood control), MWD Diamond Valley Lake (6-mos emergency storage) plus Olivenhain Reservoir serving North SD Co.

*** Out of print**

GEOLOGY AND GEOTHERMAL RESOURCES OF THE IMPERIAL AND MEXICALI VALLEYS

Lowell Lindsay and William G. Hample, eds. (1998)

-----Purchase E-Book for \$5.00 at link below-----

Google Play Books:

1998 GEOLOGY AND GEOTHERMAL RESOURCES OF THE IMPERIAL AND MEXICALI VALLEYS

PALEONTOLOGY AND GEOLOGY OF THE WESTERN SALTON TROUGH DETACHMENT, ANZA - BORREGO DESERT STATE PARK

California WATER RESOURCES DEVELOPMENT AT THE CLOSE OF THE CENTURY

GEOLOGY AND GEOTHERMAL RESOURCES OF THE IMPERIAL AND MEXICALI VALLEYS

PALEONTOLOGY AND GEOLOGY OF THE WESTERN SALTON TROUGH DETACHMENT, ANZA-BORREGO DESERT STATE PARK

SDAG PUBLICATIONS

<https://www.sandiegogeologists.org/Publications.html>

JOB ANNOUNCEMENTS

<https://www.sandiegogeologists.org/Jobs.html>

2025 SDAG MEMBERSHIP

Renew or become a new SDAG Member - 2025 Membership Fees are Due!

On-line Payment (\$30 Member; \$10 Student):

<https://www.sandiegogeologists.org/MemberFormPP.html>

Mail in or Bring FORM to Meeting:

<https://www.sandiegogeologists.org/MemberForm.pdf>

DID YOU KNOW THAT SDAG HAS A FACEBOOK PAGE?

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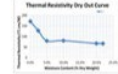


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