

## SAN DIEGO ASSOCIATION OF GEOLOGISTS



[Click here  
to join our  
Facebook!](#)

[Visit our  
Website!](#)



### 2025 OFFICERS

**President**

[Heather Reynolds](#)

(540) 525-6475

**Vice President**

[Mike Palmer](#)

**Secretary**

[Jasmine Peach](#)

**Treasurer**

[Xiomara Rosenblatt](#)

**Web Master**

[Carolyn Glockoff](#)

[CARO-LION](#)

[ENTERPRISE](#)



**SDAG  
Announcements**

### SDAG MEETING ANNOUNCEMENT

**Wednesday, December 17th, 2025**

6:00 pm - Social Hour | 7:00 pm - Dinner | 8:00 pm – Program

**LOCATION:**

[San Diego Natural History Museum](#)

Balboa Park

1788 El Prado,

San Diego, CA 92101

**SPEAKER:**

**Tom Deméré**

**TOPIC: "150 years of Paleontology at the San Diego Natural History Museum"**

**DINNER:** Mexican Buffet (includes taco station with pollo asada, carne asada, veggies, etc.)

**COST:** Member \$65.00 | Non-Member \$75.00 | Student \$35.00

#### RESERVATIONS:

Make & Pay your reservation online through the SDAG website, before **6PM WEDNESDAY, DECEMBER 10<sup>th</sup>**

*Please note, all meeting reservations require online pre-payment due to venue costs, venue contracts, and loss of money due to no shows. Refunds cannot be processed after the registration deadline.*



[REGISTER HERE](#)



[DIRECTIONS HERE](#)



# Meet Our | Speaker & Topic



## Tom Deméré

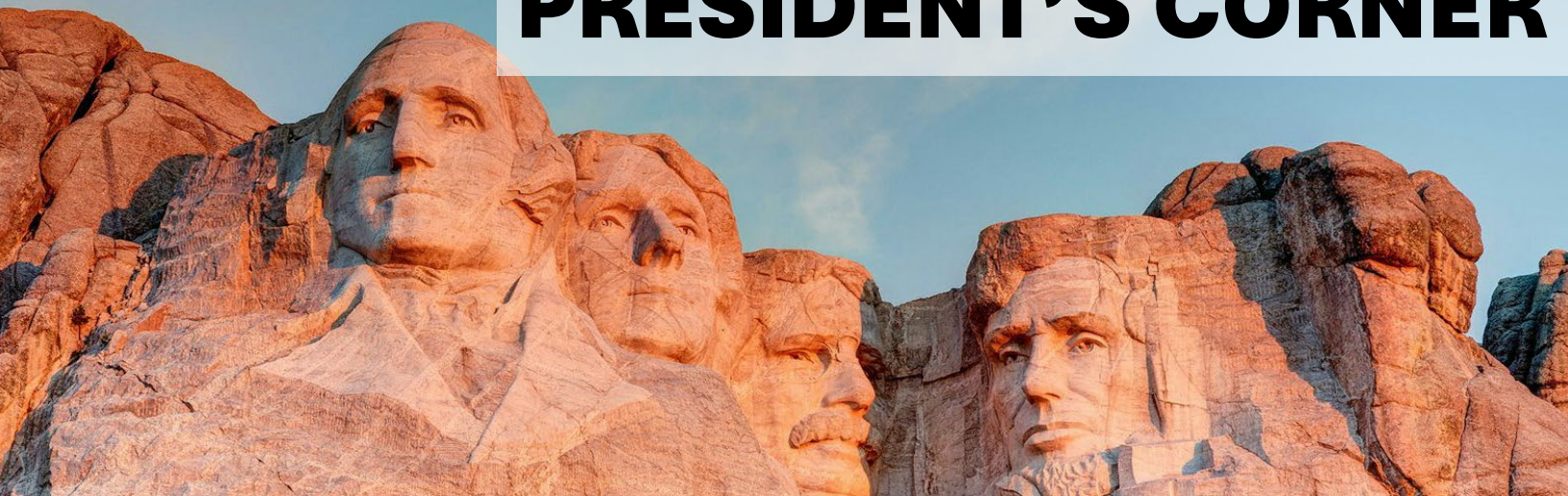
Tom Deméré attended San Diego State University (B.S., Geology), University of Southern California (M.S., Geology), and University of California Los Angeles (Ph.D., Evolutionary Biology) and has worked at the San Diego Natural History Museum since 1979, where he is Curator of Paleontology. Dr. Deméré 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.

### THIS YEAR'S TALK

# 150 YEARS OF PALEONTOLOGY AT THE SAN DIEGO NATURAL HISTORY MUSEUM



# PRESIDENT'S CORNER



## Hello SDAG Members!

It's hard to believe this year is already coming to an end! Time has flown by, and I hope you all have enjoyed our variety of speakers and topics we've had this year! As I reflect on our journey this year, it has given me immense joy being your president, from hosting our monthly meetings, especially getting to know each of you all more, preparing a field trip guidebook on the San Andreas Fault with an amazing field trip committee, finally being able to have our annual field trip in September 2025 (after it was postponed in 2024), coordinating with so many talented speakers, and now getting ready for our traditional holiday celebration at The Nat!

We had a wonderful joint meeting with AEG-Inland Empire for our November meeting held at The Old Spaghetti Factory in San Marcos. Thank you, Eldon Gath, for presenting a very captivating and well-executed talk on Orange County's tectonic geomorphic evolution! The way you walked us through the geologic history of the area, covering numerous lines of evidence, in just an hour was merely impressive! Hopefully Eldon's recorded presentation is shared with students and inspires some of them to do a master's thesis or two! The recording will be available soon on our website. Thanks again, John Teasley, for recording it!

Next, please join us for our traditional holiday celebration on December 17th in Balboa Park at the San Diego Natural History Museum (The Nat) with none other than Dr. Tom Deméré, Curator of Paleontology and Director of PaleoServices!! Tom Deméré will give a presentation on "150 years of Paleontology at the San Diego Natural History Museum." Don't wait, make your reservation NOW!! Last day to sign up is Wednesday, December 10th!

I have some exciting news to share! Please welcome Mike Palmer as our 2025 SDAG Vice President!! Also, copies of the 2nd printing of our 2025 SDAG Field Trip Guidebook "San Andreas Fault: Exploring Quaternary Geology Along the Big Pines Highway, Wrightwood, CA" will be available for purchase at our December meeting!!

If you, or someone you know, are interested in becoming an SDAG officer in 2026, please reach out to me or one of the other officers and we would be happy to add your name to the 2026 ballot!

Lastly, if you haven't already, please renew your SDAG membership or become a new member! 😊

Happy Holidays and thank you all for a wonderful year!

**-Heather Reynolds**  
**2025 SDAG President**



# 2026 Upcoming Meetings

DATE	SPEAKER & TOPICS
January 21	TBA

## NEW RESEARCH TOOL ON OUR PUBLICATIONS PAGES

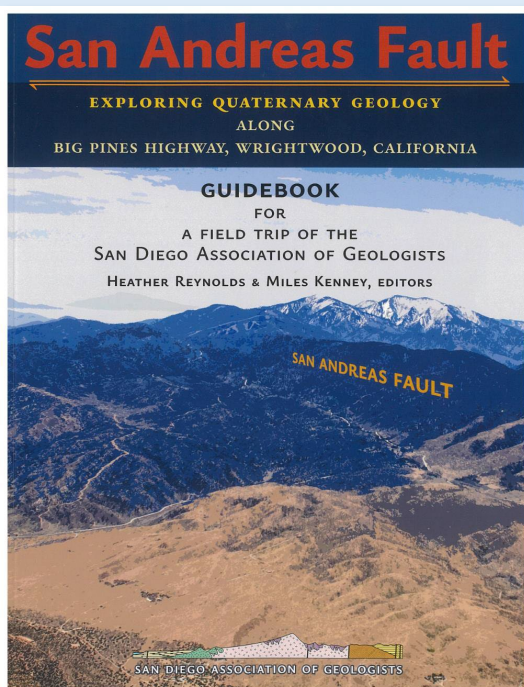
**A comprehensive listing of all papers published by SDAG, whether as annual field trip guidebooks or special publications, is available on our website.**

Entries are sorted by primary author, or chronologically by date of publication, starting with our first guidebook in 1972, later to the Julian 'Road to Gold' in 2017, and most recently to follow the San Andreas Fault to its highest elevation near Wrightwood in 2025. 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, "oikocryst" for example, you can search for that keyword. This listing is updated as new books are published. Please see the links below:

[http://www.sandiegogeologists.org/SDAG\\_Pubs\\_authors.pdf](http://www.sandiegogeologists.org/SDAG_Pubs_authors.pdf)

[http://www.sandiegogeologists.org/SDAG\\_Pubs\\_chronological.pdf](http://www.sandiegogeologists.org/SDAG_Pubs_chronological.pdf)



## 2025 FIELD TRIP GUIDEBOOKS AVAILABLE FOR PURCHASE

**NOW AVAILABLE ON THE SUNBELT PUBLICATION WEBSITE!**

**Follow this link:**

**[SUNBELT PUBLICATIONS](#)**

# 2025 SDAG SCHOLARSHIP AWARDEES

## Outstanding Research in Geological Sciences

### SDAG Shannon O'Dunn Scholarship (\$4,000)

**JENNIFER MORTON** *SDSU Masters*

Ground-truth Studies of the La Nacion Fault Zone, San Diego, California.  
nominated by Dr. Jillian Maloney

### SDAG Scholarship (\$2,000)

**HANNAH LISSNER** *USD Masters*

Assessing the Metals Variability, Clay Mineralogy and Morphology of San Salvador Island  
Paleosols.  
nominated by Eric Cathcart

### SDAG Scholarship (\$1,000)

**CICI JOBE** *USD Undergraduate*

From Park to Garden: Collaborative Soil Testing to Support Food Security in Urban San Diego.  
nominated by Dr. Claudia Christine Avila

## 2026 SDAG Officer Elections

POSITION	PROPOSED	VOTE	WRITE-IN
<b>President</b>	Mike Palmer		
<b>Vice President</b>	Jasmine Peach		
<b>Treasurer</b>	Sofia Tovar		
<b>Secretary</b>	-----		

Above is the current ballot that will be issued at the upcoming December meeting. There is still time for anyone who is interested in filling the secretary position. Please contact any of our current SDAG officers if you are interested in joining the community next year!





# GEOTOURS | 2026 ICELAND TRIP

## INTERESTED IN VISITING ICELAND?



**GEOTOURS**  
EXPLORE THE WORLD

Please join Mesa College geology professor, Don Barrie, along with Matt Ebner, retired geography professor and owner/operator of Geotours, LLC, for a 10-day, geologically themed Iceland trip.

This trip is similar to the trip Don and Matt led for SDAG in 2023. All are welcome, geologists and non-geologists alike. Over 10 days, we'll circumnavigate the island by bus, stopping along the way for many activities.

### MESA COLLEGE ICELAND - 2026



**2026 ICELAND TRIP DETAILS**  
**[CLICK HERE]**

For trip related inquiries contact

**Don Barrie**

[dbarriegeo@gmail.com](mailto:dbarriegeo@gmail.com)

**Matt Ebner**

[mattebner@geotours.us](mailto:mattebner@geotours.us)



# Field Notes & Snapshots

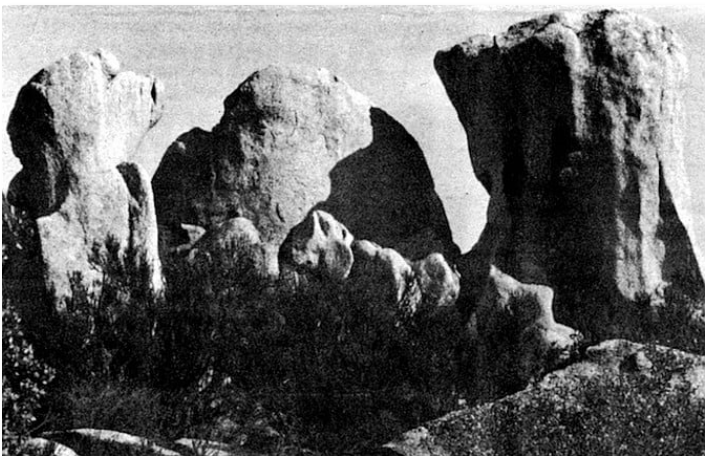
*Brought to you by your SDAG Membership*

## THE DIRT BENEATH SAN DIEGO

Unlike most of North America, we share a crust with the Pacific

*Author Gordon Smith*

*Publish Date Nov. 17, 2025*



Tonalite formations along Interstate 8

The Reader has started this series of its best stories from the past 52 years — 2600 cover stories and some remarkable interior features — to help make up for the loss of its physical edition, which was once large enough to hold whole oceans of print. These stories will feature all the original illustrations and photos (plus easy-to-read typography).

^^^^^^^^^^

The boulders rattle down a chute into the deep black mouth of the crusher. Inside the machine, two heavy steel plates come together repeatedly with force beyond imagination. Whoomp! Whoomp! Whoomp! And 150 million years of history is broken into softball-size pieces and comes out on a conveyor belt on the other side, moving toward yet another crusher in this quarry just west of Cowles Mountain on Mission Gorge Road. Granite blocks, National Quarries. Nearly all of northern and eastern San Diego County is made up of granite rock; it formed in vast pools underground while the island volcanoes were still smoking to the west.



Gordon Gastil peers into the mouth of the crusher, checks the rock coming out the far side, smiles faintly. The rock is andesite, he says, a hard gray volcanic stone that once constituted a chain of islands where San Diego now stands. Gastil, a professor of geology at San Diego State University, has spent more than twenty years studying the evolution of the San Diego area and the forces that gave it its current shape, and he makes such pronouncements with conviction. "Old rock like this makes up the basement rock of the region all the way from Guerrero Negro in Baja California up to Orange County" he adds.

Gastil and I pass south of Rancho Bernardo, crossing again the dried-up delta of the river that flowed here 50 million years ago. That river flowed for ten million years.

Ancient volcanoes lie buried beneath the beaches of San Diego. Mountain ranges that once rose across the county have disappeared. A river that flowed here from Sonora, Mexico dried up long ago, when tapirs the size of terriers wandered the county and crocodiles wallowed in marshy lagoons. The history that Gastil studies is a history beyond people, a history of primitive planetary energies and great, unfathomable time.

CONTINUES ON NEXT PAGE





# Field Notes & Snapshots

*Brought to you by your SDAG Membership*

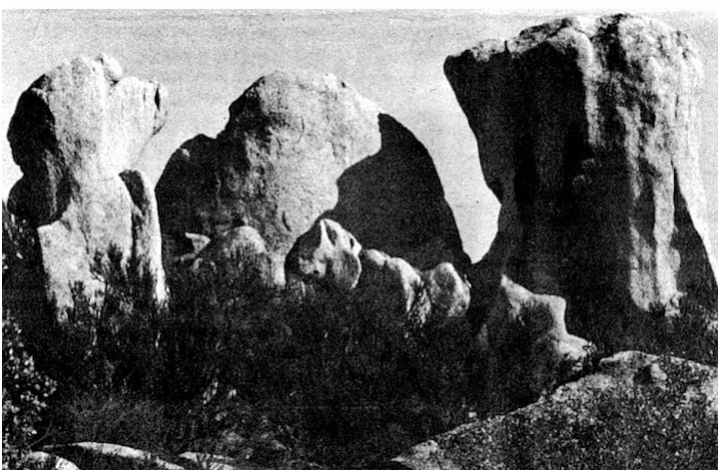
## THE DIRT BENEATH SAN DIEGO (CONTINUED)



And yet much of it is vitally important to humans. The water that flowed across underground reservoirs of still-cooling granite 100 million years ago contained the gold that prospectors found in the Laguna Mountains, leading to the founding of the town of Julian and, subsequently, the Cleveland National Forest. A gigantic plate of the earth's crust that began to move away from mainland Mexico 60 million years ago is still moving, causing the earthquakes that make skyscrapers sway and send bookcases crashing to the floor. One of the biggest questions in San Diego's future is fundamentally a geological one: how much oil lies off our coast? And remnants of the volcanic islands that once stood in San Diego's place are crushed and used to make asphalt — tough, long-lasting asphalt — that covers the county's roads.

Geology of the La Jolla Quadrangle. The volcanic islands that once were San Diego spewed lava and ash for 60 million years. And then the volcanoes fell silent and the earth's crust began to rise.

We had arrived unannounced at the quarry in the early morning. The management, suspicious at first and not eager for publicity because of ongoing conflicts with surrounding housing developments, at last agreed to let us in (on condition that they and the quarry remain unnamed). And almost immediately we came to a great gray wall of stone — the original quarry ledge, now abandoned — rising out of a pool of murky green water. In that wall you can still read the record of the awesome volcanoes that built the ancient islands.



Pride of the West mine, Julian, 1900. The water that flowed across underground reservoirs of granite 100 million years ago contained the gold that prospectors found in the Laguna Mountains, leading to the founding of Julian.

Seams in the gray mass represent fractures through which molten rock rose toward the surface, then cooled. In places, smaller rocks embedded in the gray stone testify to material that was hurled high into the air and rained down on the surrounding region. "It blew out in pieces the size of your fist down to dust," Gastil comments. "The fine layering you can see over there indicates ash falls. The rock here probably goes down for a kilometer or two; it's very thick. There's no place in the county where these old rocks are so undisturbed."

Polishing granite, National Quarries. The surface of dense granite like that quarried by National can be polished to a degree of level smoothness unmatched by any other material on earth.

**[To continue reading full article follow this link \[HERE\]](#)**





# SDAG | November Meeting Recap

A huge thank you to all the SDAG and AEG members who braved the rain to attend Eldon Gath's talk! It was definitely one you didn't want to miss. Eldon's interpretation of the understudied geologic landscape of Orange County was fantastic, and as he mentioned, there are plenty of potential master's theses waiting to be explored....\*\*hint hint\*\* And a big thank you to Mike Palmer for stepping up to volunteer as our Vice President! We appreciate your support and leadership. Can't wait to see you all at the next meeting!





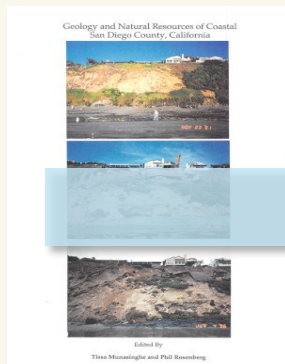


# SDAG | Publications

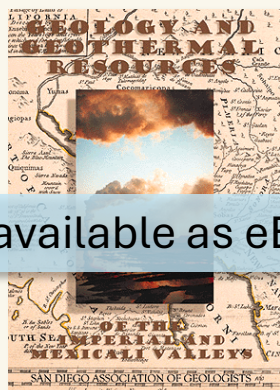
The SDAG publication page includes links to in stock books we sell thru Sunbelt Publications, out of stock books we sell thru Google Play Books, and out of stock books that we provide free as scanned copies to download.

## FIELD TRIP GUIDES & RESEARCH REPORTS

Now available as eBooks!



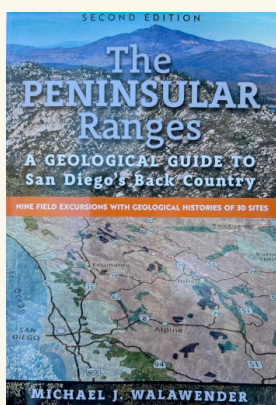
**Geology And Natural Resources Of Coastal San Diego County, CA (1996)**



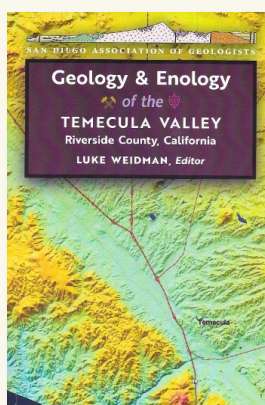
**Geology And Geothermal Resources Of The Imperial And Mexicali Valleys (1998)**



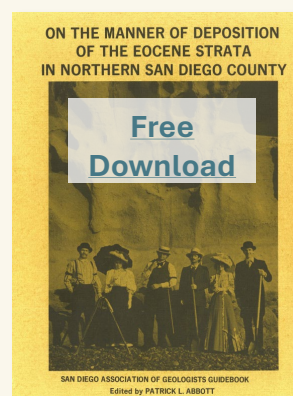
**WATER FOR SOUTHERN CALIFORNIA: Water Resources Development (1999)**



**The Peninsular Ranges: A Geological Guide to San Diego's Back Country 2nd Edition**



**Geology & Enology of the Temecula Valley Riverside County, California 2nd Edition**



**On the Manner of Deposition of the Eocene Strata in Northern San Diego**

## FREE GUIDES AVAILABLE FOR DOWNLOAD

- [1972 Otay Mesa](#)
- [1977 SW San Diego](#)
- [1978 Coronado Islands, BC](#)
- [1979 San Diego Region](#)
- [1987 Julian Gold](#)
- [1981 Geologic Investigations of the San Diego Coastal Plain](#)
- [1982 Geologic Studies in San Diego](#)
- [1985 Eocene in San Diego](#)
- [1989 Fault Features: La Jolla - Ensenada](#)



## SAN DIEGO ASSOCIATION OF GEOLOGISTS

**DIAMOND SPONSORS \$1000+**

Link to our [Sponsors Page](#)



Kuper Consulting LLC  
[tom@kupercon.com](mailto:tom@kupercon.com)  
[dorian@kupercon.com](mailto:dorian@kupercon.com)



**Dr. Pat Abbott**

To Promote  
Geologic Knowledge

***Shannon O'Dunn***  
***2025 Scholarship***

**\$1500 ANONYMOUS  
SPONSOR**

**\$10,000 Anonymous Sponsor for the 2<sup>nd</sup> edition of the 2010 Geology and  
Lore of Northern Anza-Borrego Desert Region**

**ANONYMOUS  
SPONSOR**



**COMPANY**

Your Logo Here

**Renew or become a new  
SDAG Sponsor**

Minimum \$100 includes annual  
Membership: [SPONSOR FORM](#)

**Contact one of our officers for details**

**BECOME AN SDAG  
MEMBER**

Renew or become a new  
SDAG Member! If you have  
not paid your dues this the  
time do so!

**On-line Payment (\$30  
Member; \$10 Student) or  
Bring FORM to Meeting**

## SAN DIEGO ASSOCIATION OF GEOLOGISTS

### RUBY SPONSORS \$500



CIVIL & ENVIRONMENTAL CONSULTANTS

### EMERALD SPONSORS \$100

Dave Bloom  
Larry Cann  
Dr. Vic Camp  
John Hoobs

Christian Wheeler Engineering  
Lowell E. Lindsay & Diana Lindsay  
Greg Cranham

Consulting Geologist

Dr. Margaret R. Eggers, CHG  
Eggers Environmental, Inc.

Patrick Lehrmann  
Advantage Geophysics, Inc.

Eldon Gath  
Earth Consultants International

GEI Geotechnical Exploration Inc.

Carolyn Glockhoff  
Caro-Lion Enterprises

Stan Helenschmidt  
Helenschmidt Geotechnical, Inc.

Ed & Hanna Hernandez  
Project X Corrosion Engineering

Christina Tretinjak  
Ninyo & Moore

Phil Farquharson  
Geology Guy

Joe Corones  
Jeff Hull

Verdantas

Dr. Monte Marshall  
SDSU Prof. of Geology and Geophysics, Emeritus  
Monte and Diane Murbach  
Murbach Geotech

Tod Clark  
Pacific Drilling Co.

Gerald Shiller  
Scott Snyder  
David and Jan Steller  
Dr. Anne Sturz  
Sue Tanges  
John Teasley  
Vanessa Nicole Jewels  
Virtual Latinos

Mary Walke  
Carole L. Ziegler  
Anonymous Sponsor