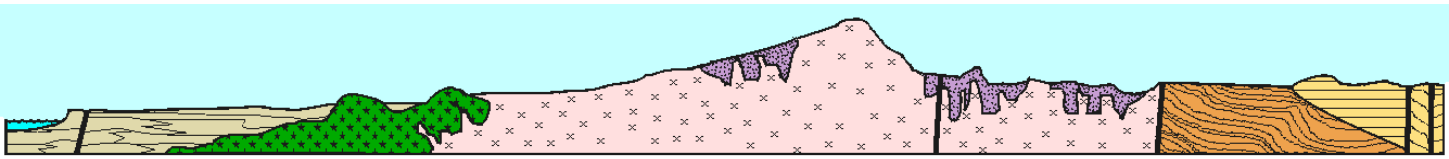


SAN DIEGO ASSOCIATION OF GEOLOGISTS

www.sandiegogeologists.org

SDAG MEETING ANNOUNCEMENT

WEDNESDAY, OCTOBER 21, 2015

Results of Recent Slip Rate Studies on the Elsinore Fault in the Coyote Mountains
and
The Open Interval for Large Earthquakes in the Southern San Andreas Fault System

Presented by:
Tom Rockwell

Where: **Phil's Barbecue Point Loma**
3750 Sports Arena Boulevard
San Diego, 92110
(619) 226-6333

When: 5:30 pm - Social Hour
6:30 pm - Dinner
7:30 pm – Program

Dinner: Choice of Baby Back Ribs, Chicken, or Veggie Burger (please reserve as such). Sides include sweet baked beans, macaroni salad and corn bread. Brownies and cookies for desert. Cash bar.

Cost: $35 per person, $5 discount for members, STUDENTS: $15. Add $5 if you did not make a reservation.

Directions: FROM INTERSTATE 5: Take exit 20 towards Sports Arena Blvd. Head west and the restaurant is on the right hand side (See Map). Note: the room we will be using is across the parking lot and is separate from the main restaurant.

Reservations: Make your reservation **online** at www.sandiegogeologists.org **no later than noon, Monday October 19th**. Reservations cannot be guaranteed after Monday at noon; but are always preferred over walk ins. Reservations well before the deadline are MUCH appreciated.

ABSTRACT

Results of Recent Slip Rate Studies on the Elsinore Fault in the Coyote Mountains

And

The open interval for large earthquakes in the southern San Andreas fault system

Different canyons along the Elsinore fault in the Coyote Mountains expose a variety of rock types, including limestone, granitic rocks, amphibolite, other metamorphic rocks. The relative proportions (or absence) of these rock types in the clast assemblages emanating from each drainage can be used to source alluvial fans that have been offset by the fault. In this study, we have counted over 300 clasts from dozens of alluvial fans and potential source drainages to match each fan to its source. We have then applied U-series dating of pedogenic carbonate to date the fans and resolve a long term slip rate. The timing of the most recent surface rupture, which produced as much as 2.7 m of lateral displacement, occurred in the past 300 years, whereas the penultimate event occurred about a thousand years ago. Placing these events into the regional earthquake chronology compiled from paleoseismic data from several dozen trench sites in the southern San Andreas fault system, along with more

precise dating of Lake Cahuilla sediments that cross many of these sites, allows for sequencing of the past 1100 years of large (M6.5 and larger) earthquakes for the southern 150 km of the main plate boundary system. Major faults capable of larger earthquakes include the San Andreas, San Jacinto, Elsinore, and Earthquake Valley faults. Displacement data have been generated for most of these faults for the past one to several events. Using these observations on timing and displacement in past large earthquakes, and assuming reasonable seismogenic thicknesses, estimates of moment release through time can be made. Based on these estimates, at least three generalizations are clear: 1) M6.5 and larger earthquakes account for most of the moment release in the southern San Andreas fault system over the past 1100 years; 2) large earthquakes on individual faults are quasi-periodic but display a relatively high coefficient of variation in recurrence time, similar to most long California records; and 3) moment release has temporally varied during the past 1100 years but within potentially predictable bounds. Together, the record suggests that the southern San Andreas fault is late in the cycle but not necessarily "overdue", and that a systems level approach may be more accurate in long term earthquake forecasting than data generated from a single element of the fault system.

SPEAKER BIO

Thomas K. Rockwell

Dr. Thomas Rockwell is a nationally and internationally renowned paleoseismologist and structural geologist who has published over 135 articles in major international journals, coauthored a number of book chapters, published 50 papers in conference proceedings and guidebooks, and coauthored over 300 papers presented at professional meetings. Having served as Geology Group Leader for the Southern California Earthquake Center for many years, he is an expert on the tectonics and earthquake hazards of southern California and Baja California, has conducted extensive trenching programs to date earthquakes on faults in the western U.S., South and Central America, the Middle East and Asia, and routinely uses soil stratigraphy and geomorphology combined with various radiometric dating techniques to assess rates of fault activity, determine recency of faulting, and date past earthquakes. In the past decade, he has initiated a number of ground-breaking studies on fault zone architecture and processes in southern California with PhD students Ory Dor and Neta Wechsler, as well as with many MS-level students. New work on fault zone damage, pulverization, and fluid processes has resulted in over a dozen well-cited papers on this topic since 2006. His other research focuses on understanding earthquake occurrence in time and space. Current projects include the characterization of fault systems behavior by understanding patterns of past recurrence of large earthquakes on faults in southern California, northern Mexico, Panama, Argentina, Portugal, Spain, Turkey, India, and Israel. This work includes resolving information on slip per event, as it relates to understanding the controls on segmentation and rupture termination. Current work on fault zone processes initially focused on damage characteristics, but has shifted to the role of fluids and the processes that produce the damage. He has also worked extensively on the affects of tectonism on the landscape, and using geomorphology to constrain rates and timing of tectonic events. Included in this latter aspect is detailed mapping and dating of marine terraces along the west coast of North America and assessment of paleosea level during the late Quaternary.

UPCOMING MEETINGS

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

November	Nicholas Clapp – Lost City of Ubar
December	Annual Christmas Meeting

2015 SDAG EXECUTIVE COMMITTEE

PRESIDENT – Jennifer Bauer Morton; geologyjen@yahoo.com

VICE PRESIDENT – **Randy Wagner;** Ph: (760) 877-3490 randallwagner@live.com

SECRETARY –Rupert Adams, rsa_sdag@geoconinc.com

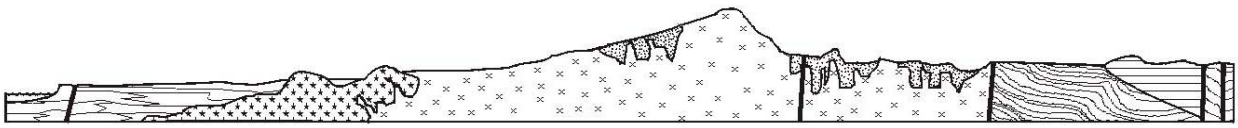
TREASURER – Chris Livesey, liveseychris@yahoo.com

PUBLICATIONS – Lowell Lindsay; *Sunbelt Publications*; Ph: (619) 258-4911, x111; fax:(619) 258-4916; llindsay@sunbeltpub.com

WEBMASTER – Carolyn Glockhoff; *Caro-Lion Enterprises,* Ph: (858) 549-3396; carolyn@caro-lion.com

2015 SDAG MEMBERSHIP

It's never too late to pay your membership! The regular membership is $25 (only $5 for students) while the sponsor membership starts at $100. Both forms are included on the following pages or they can be found on the home page of the SDAG website.



SAN DIEGO ASSOCIATION OF GEOLOGISTS

www.sandiegogeologists.org

2015 MEMBERSHIP FORM

NAME: _____ **DATE:**_____

Please type or print clearly.

Home Address: _____

_____

_____

Work Address: _____

_____

_____

Please include company, university or other affiliation

Home E-mail Address: _____

Work E-mail Address: _____

***NOTE**: Your membership dues include delivery of the monthly SDAG newsletter and announcements to the email addresses given.*

Phone: Home: _____ Work: _____ Cell: _____

Website: _____

Are you willing to serve as an **officer**? _____ Are you willing to volunteer as a **guest speaker**? _____

Field(s) of Interest: _____

Dues:
(check choice)

_____ **Student Member (email delivery only) $ 5.00**

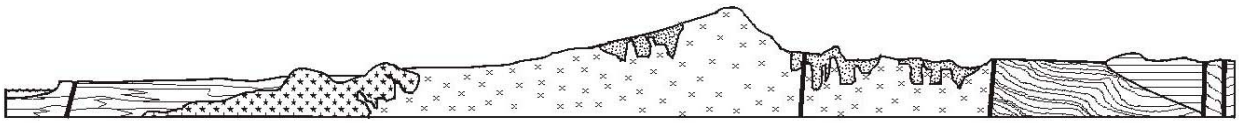
_____ **Regular Member (email delivery only) $ 25.00**

_____ **Donation Student Scholarships $ _____**

☐ New/Returning Member ☐ Continuing Member

Please enclose a check payable to SDAG, and mail to:

San Diego Association of Geologists (SDAG)
3130 N Evergreen Street
San Diego, CA 92110



SAN DIEGO ASSOCIATION OF GEOLOGISTS

2015 SPONSORSHIP FORM

NAME: _____ **DATE:**_____

(as you would like it to appear in Newsletter, Website, and Guidebook)

Please type or print clearly, and check ☑ *preferred mailing address below.*

☐ **Residential Address:** _____

_____

☐ **Office/School Address:** _____

_____

_____

Website: _____

Home E-mail Address: _____

Work E-mail Address: _____

***NOTE**: Your Sponsorship includes a complimentary SDAG membership, and delivery of the monthly SDAG newsletter and announcements to the email addresses given.*

Phone: Home:_____ Work:_____ Cell:_____

Donation Level and Consideration:

☐ **EMERALD $100.00** (In addition to monthly recognition for your contribution, you are entitled to a free Internet "link" from SDAG Website. We also list all Sponsors in any publications printed this year)

☐ **RUBY $500.00** (In addition to the above, you are entitled to an image of your business card in the monthly newsletter and SDAG Website)

☐ **DIAMOND $1,000.00** (In addition to the above, you will receive a commemorative plaque in recognition for your most generous support of the organization)

New Member / Donor ☐ Continuing Member ☐ Change of mailing address: ☐

Are you interested to serve as an officer? _____ Willing to volunteer as a guest speaker? _____

Please make check payable to San Diego Geological Society, Inc., a 501(c)3 public benefit nonprofit educational corporation (in order to claim a tax deduction), and mail to:

San Diego Geological Society, Inc.
3130 North Evergreen St.
San Diego, California 92110 ***Thank you!***

Donations may also be made at monthly meetings.

Revised 11/18/2014

SDAG PRESIDENT'S CORNER

Greetings SDAG Members!

I hope everyone enjoyed the new meeting location, Green Dragon Tavern, in Carlsbad. Dr. Mark Legg provided a wonderful talk on his new research on the Continental Borderland. It is always a treat for me to get to hear Mark discuss his research, as he was one of my early geology mentors.

This month we will be back at one of our favorite locations, Phil's BBQ in Point Loma (yes, even the vegetarian President enjoys Phil's! They have a great veggie burger!) Dr. Tom Rockwell will be speaking on the topic of our upcoming field trip – the Coyote Mountains and the Elsinore fault. He will also discuss new research on the San Andreas fault. Tom's expertise on the region will provide wonderful insight into what we will see on the field trip.

If you are planning on going on the field trip, we will be having a supplemental SDAG meeting on November 4th. This will be an informal meeting at Giovanni's in Kearney Mesa, with all-you-can-eat pizza, salad, and soda. George Morgan will be presenting an overview of what we will see on the trip. George and his brother JR have spent many years investigating and mapping the Coyote Mountains and will be leading the majority of the field trip. We are so fortunate to have so many experts willing to providing informative talks right before the trip!

We will also have our regular, third Wednesday of the month meeting on November 18th, where Nicholas Clapp will present his documentary on the Lost City of Ubar.

Hope to see you all there!

Jennifer Bauer Morton, PG
SDAG President
geologyjen@yahoo.com

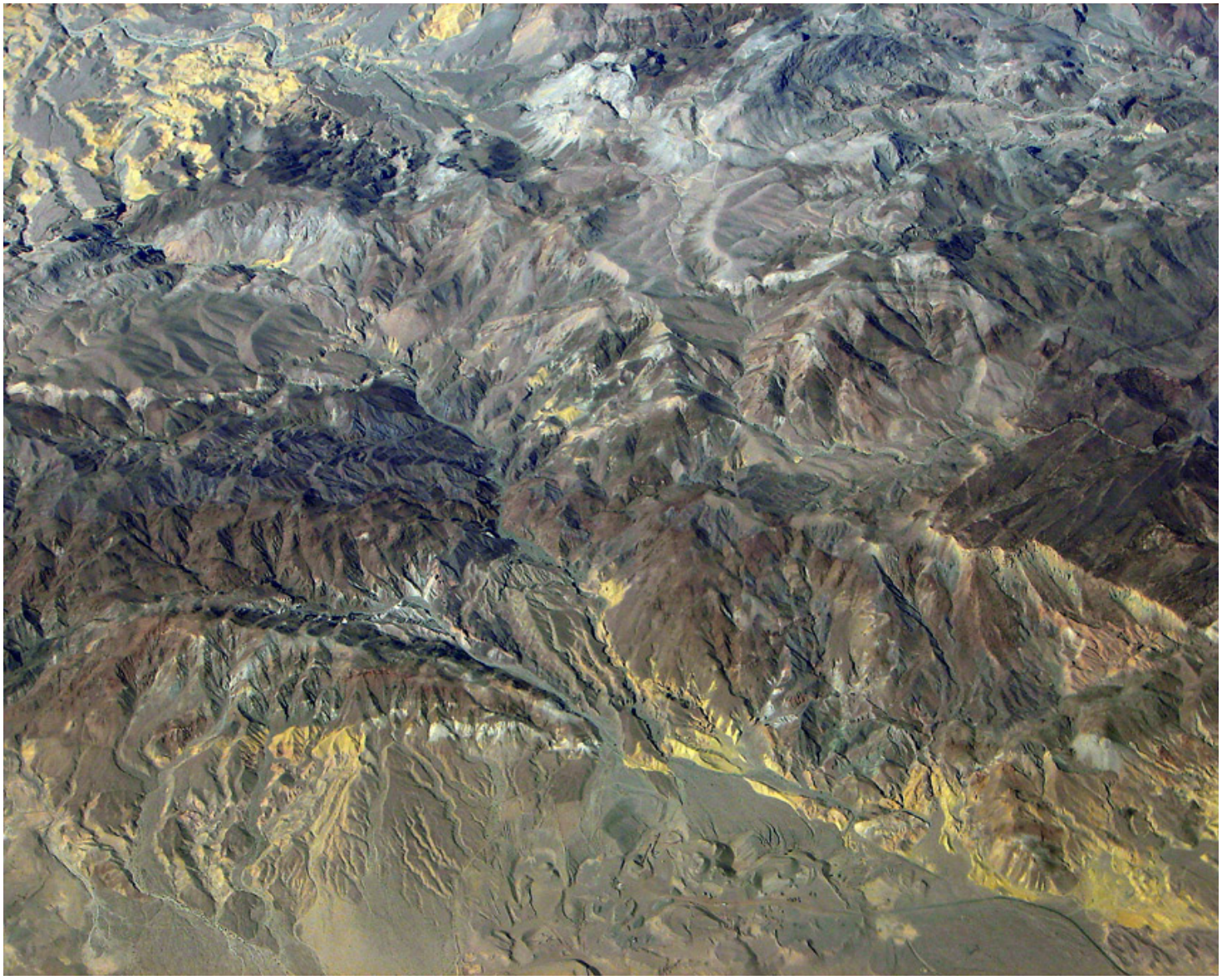
ANNOUNCEMENTS

THE COYOTE MOUNTAINS: TECTONICS AND GEOLOGY OF THE WESTERN SALTON TROUGH

November 6-8, 2015

Field trip are now available on the the next few pages, including the sign up form, waiver etc. Deadline for registration is October 23, 2015 or sooner if we reach the limit of 50 people, so sign up quick!

If you have any questions, call or e-mail to Randy Wagner: randallwagner@live.com (760) 877-3490



THE COYOTE MOUNTAINS: TECTONICS AND GEOLOGY OF THE WESTERN SALTON TROUGH

The 2015 San Diego Association of Geologists annual field trip will explore the tectonics and geology of the Coyote Mountains in the western Salton Trough. The trip will be by personal vehicles.

DATES: **October 23:** Last day to sign-up unless field trip limit of 50 people is reached sooner.

Friday, November 6: Meet at the Community Park on S2 2.2 miles northwest of Ocotillo. Leave 10:30 am for an OPTIONAL hike in the Domelands area or Fossil Canyon.

Saturday, November 7: Meet at Ocotillo Community Park. Check in starts at 6:00 am. Explore the southeastern Coyote Mountains. Dinner at sunset. Camp at the park.

Sunday, November 8. Full breakfast. Explore Coyote Mountains. Lunch provided.

RECOMMENDED EQUIPMENT: **Prepare** for several short desert walks. Bring hat, sunscreen, walking stick, and sturdy boots. Bring camping equipment: tent, sleeping bag, folding chair, coffee mug, binoculars, etc.

COST: $125 per person. Discount for SDAG members and students. Fee includes guidebook, camping, five meals, snacks, and beverages. Fees are non-refundable. All ages welcome.

RESERVATIONS: Reservations are on a first-come, first-serve basis. See options on page 2. The Saturday Alternative 1 trip will be limited to approximately 8 to 10 4WD vehicles, while the entire field trip will be limited to approximately 50 people due to the meals and other logistical issues.

QUESTIONS: Contact SDAG VP Randy Wagner at: randallwagner@live.com. or 760-215-5540

2015 SDAG FIELD TRIP REGISTRATION FORM ***TODAY'S DATE*:_____, 2015**

Name(s): _____

Address: _____

City/State/Zip: _____

Mobile Phone(s): _____

Email: _____

Preferences (see next page):

- Friday hike: □**Long** (6+ mi Domelands), □**Short** (2 mi Fossil Canyon), □**None**
- Saturday: □**Alternative 1** (High Road) □**Alternative 2** (Low Road)
- Sunday: □**Alternative 1** (Low Road) □**Alternative 2** (High Road)

TOTAL NUMBER AND FEE FOR YOUR PARTY

___\$125/ea. Non-members: $ _____

___\$110/ea. SDAG member discount: $ _____

Member spouse cost w/o field trip guidebook

___\$ 50/ea. Students (1st 10) $ _____

TOTAL ENCLOSED: $ _____

MAIL FORM AND CHECK (**payable to SDAG**) TO:

SDAG Field Trip Registration
c/o Randall Wagner
2801 Dove Tail Drive
San Marcos, CA 92078

San Diego Geological Society, Inc. and San Diego Association of Geologists

General Release and Save Harmless Waiver

The undersigned is advised that dangers and hazards may include but are not limited to uneven ground, steep trails, heat and cold stress, poisonous reptiles and insects, open flames, uncertain and possible extreme weather conditions, floods, earthquakes, and landslides on the San Diego Association of Geologists field trip planned for November 6 through 8, 2015, and does hereby assume any and all risks involved in connection with the field trip and does hereby save and hold harmless San Diego Geological Society, Inc., and its board of directors, its committees including the San Diego Association of Geologists and its officers and members, Imperial Valley Desert Museum, and other participants, all claims, losses and damages (including attorneys fees and any costs involved because of said claims) on account of injury, illness, death, property damage, and inconvenience or loss of money due to delay that may arise, by reason of my participation in the field trip. I understand that I am responsible for carrying my own medical and liability insurance.

Signature

Date

.

ITINERARY and OPTIONS for PREFERENCES:

Friday, November 6: Meet at the Community Park on S2, 2.2 miles northwest of Ocotillo. Leave at 10:30 am for an OPTIONAL hike in the Domelands area or Fossil Canyon. The long hike to the Dome- lands will be on and off trails on rugged terrain at least 6 miles long, and may take up to 6 hours to complete. The Fossil Canyon hike will be about 2 miles long take up to 4 hours and will keep to relatively low relief areas. Check in will be open in the evening by 5pm (approximate sunset). No meals provided on Friday.

Saturday, November 7: Meet at Ocotillo Community Park. Check in starts at 6:00 am. After a continental breakfast, we will travel by car caravan to see the geologic and tectonic features of the southern and eastern flanks of the Coyote Mountains. Our campsite will be at the Ocotillo Community Park. Although there are no showers, there are separate bathroom facilities and a kitchen large room in the community center building.

There will be two alternate field trip routes on Saturday. **Alternative 1 (High Road)**: One will travel to the top of the Coyote Mountains via Painted Gorge High Road and out to an overlook above Fossil Canyon. This alternative will be over a very rugged roads that require high-ground clearance 4WD vehicles. Due to the short daylight hours in November, people going on this will need to meet at the Painted Gorge Kiosk by 7:30 am. **Alternative 2 (Low Road)**: The other field trip route will be along the southern and eastern flanks of the Coyote Mountains on "typical" dirt roads of the backcountry. We will look at features of the Elsinore fault zone and the Paleozoic to Quaternary geologic units making up the Coyote Mountains.

Sunday, November 8. After a full breakfast in camp, we will depart the Ocotillo Community Park camp site. There will be two alternate field trip routes on Sunday. **Alternative 1 (Low Road)**: This field trip route will include a stop at an exposure along the Painted Gorge Wash fault and partially retrace the "low road" route of Alternative 2 of Saturday. Lunch will be provided on the route. The last stop will wrap up around 3 pm, well before sunset. Those who need to depart early have the option to break away around noon. **Alternative 2 (High Road)**: This field trip route will retrace the "high road" route of Alternative 1 of Saturday. With an early start, the group will be back down the mountain by 3pm. A bag lunch will be provided. There will be no option for early departure.

The Community Park will be available for camping Sunday night. No meals are provided after Sunday lunch.

Another **High Road** opportunity will be available on **Saturday, November 14**, led by George Morgan. This opportunity is self-supported. No meals, beverages, or other logistical services will be provided by SDAG.

SDAG ONE STOP WONDER

What: SDAG ½-day Field Trip to View Agmatite (Pretty Rocks!)

Date: Oct. 17, 2015, 9:00 am

Place: Mesa Grande 7.5' quadrangle, Carney Canyon (T12S, R1E; NE 1/4 sec. 11)

In the course of mapping in the Mesa Grande quadrangle, northern San Diego County, California, CGS geologist Janis Hernandez and CGS volunteer Vicki Todd discovered spectacular exposures of agmatite (field term for commingled fine-grained gabbroic dikes and felsic host rocks, Paterson et al., 2010), also referred to as "pollywog agmatite" (Dave Tucker, 2010). In Carney Canyon, agmatite consists of felsic granitic rock that contains subequal volumes of fine-grained gabbroic rocks mostly as ribbon-like inclusions (Fig. 1).

The agmatite body measures at least 4.5 km long and 850 m in width (Fig.2). It is bounded on the east by a pluton of the tonalite of Alpine and a lensoid body of fine- to medium-grained gabbro; the western contact has not been mapped. The agmatite body strikes NNE, ~parallel to the strike of foliation and contacts in this area. The tonalite pluton and one or more gabbro plutons, including Black Mountain, to the east are cut by leucogranite dikes emplaced ~parallel to plutonic contacts. These dikes may emanate from the same source as numerous, small- to medium-sized leucogranite plutons that are spatially associated with the gabbro plutons east of Carney Canyon.

The origin of much smaller, but similar, bodies of agmatite elsewhere in San Diego County has been attributed to mingling of ~coeval granitic and gabbroic magmas (e.g., Todd and Hernandez, 2014). Possible candidates for parental agmatite magmas in Carney Canyon are the tonalite of Alpine and the Cuyamaca Gabbro. If Alpine tonalite was the granitic parent, it apparently underwent some degree of crystal fractionation to a more silicic composition. Alternatively, if the granitic parent was derived from the same magma source that produced the leucogranite dikes and plutons, the agmatite may have intruded the zone of contact between tonalitic and gabbroic magmas.

Directions: Take Highway 78 east toward Ramona. Past Weekend Villa Rd (on the left), #78 approaches the outskirts of Ramona and bends south. On the curve of the bend, turn left onto West Haverford Rd. After passing Pine, Lilac and Elm streets on the right, West Haverford Rd then makes a right-angle bend to the north and becomes Pamo Road. (If you have continued on #78 toward the center of Ramona, you'll cross Ash Street and know you've gone too far).

Continue north on Pamo Rd into Pamo Valley. On the right, you will pass the first of two USFS seasonal truck trails. Continue on Pamo Rd past the Almond Ranch (on the right) to the second seasonal truck trail, which is located in Carney Canyon (distance from W. Haverford Rd to Carney Canyon is roughly 10 km). If you drive to the end of Pamo Rd, you'll have gone too far. We'll park at the beginning of the Carney Canyon truck trail, wherever our vehicles won't impede traffic on Pamo Rd or the truck trail. We should double up and take as few vehicles up the canyon as possible!

Scholarship Offer: Academic Year 2016-2017

One, $5,000.00 scholarship is available through the Bighorn Desert View Water Agency for students focusing on water resource management. Further information and application forms are available via the following link:

http://www.bdvwa.org/

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.

SDAG RESEARCH TOOL

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, up the San Luis Rey River in 2013, and from Coast to Cactus in 2014. 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

THE GEOLOGICAL SOCIETY OF AMERICA®

The 2015 GSA Annual Meeting will be November 1 - 4, 2015
in Baltimore, MD, at the Baltimore Convention Center

SDAG MONTHLY PHOTO COMPETITION

…sadly, no entries this month.

Geology Job Seekers

We have heard from many upcoming geologists at our recent meetings, all of whom are seeking work opportunities here in San Diego. Included herein, in no particular order, are bio's and contact information of our members looking to gain a foothold in the local professional community:

SENIOR GEOLOGIST - Bilingual English and Spanish speaker with 12 years of experience in geological, geotechnical, and hydrogeological investigations for civil projects such as highways, railway lines, dumping sites, dams and residential buildings. A postgraduate specifically trained in environmental management and groundwater hydrology. Skilled in site management, drilling campaigns, and supervision of geotechnical laboratory and site tests.

Detailed work experience, education, and recommendations at http://www.linkedin.com/in/sergiopostigo/. Email sergiopostigo@yahoo.com or call Sergio Postigo at 619-450-3642

This is Farida Baxamusa, MS- Earth Science from Scripps Institution Of Oceanography (SIO), University of California, San Diego (UCSD). I am originally from India, and have another Master's in Earth Sciences from St. Xavier's College, University of Mumbai, India. I have also been granted the Dr. Ratan Nadirshaw Sukeshwala and Dr. Dayanand Dattatraya Yellur scholarship for securing highest rank in Earth Science at MS Part I and Part II. After completing my MS in India, I secured an internship at Oil and Natural Gas Corporation (ONGC), Mumbai, India. Later I worked as an Earth Science lecturer at St. Xavier's College, University of Mumbai, India where I

held classes, directed discussions among large groups ranging from 35 to 80 students on mineralogy, petrology, geochemistry, crystallography, economic geology, oceanography, and plate tectonics and led lab courses involving mapping, stratigraphy, and paleontology. In September of 2013, I was accepted at SIO, UCSD for a master's program. Dr. Lisa Tauxe was my advisor and I worked as a research assistant under her in the field of paleomagnetism. I worked in the paleomagnetism laboratory where I skillfully selected quenched rock materials from lava flow samples to obtain accurate estimates of the Earth's magnetic field intensities. I developed python scripts to analyze individual samples to obtain their paleointensity values. I also worked as a teaching assistant for a year where I assisted teaching undergraduates introductory geology and Earth processes, collaborated with other teaching assistants and professors to aid in conducting an introductory course about hydrologic processes on Earth and held office hours, tutored students, proctored and graded exams. Around the time of completion of my degree I presented my year's research to the faculty members of the Geoscience Research Division (GRD) and qualified for my MS in Earth Science and graduated in September of 2014. I am currently doing 3 part time jobs, one as a Staff Research Associate at SIO, the other as a Staff scientist at the Bodhi Group where I perform phase I site assessments, and the third as a geology education website volunteer at California Coastal Commission Public Education Department, CA. I am now actively looking for a job in environmental consultancy firms or educational institutions. I believe that I have a varied background and education and the perseverance and grit in achieving excellence in everything I do. If you have any advice, jobs, internships please feel free to contact me at fbaxamus@ucsd.edu or call me on 858-397-8456. Your help and guidance will be highly appreciated.

REQUEST for 2015 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 for our San Diego Association of Geologists (SDAG) group. 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.