

31st. ANNUAL SDSU GEOLOGY ALUMNI FIELD TRIP

A Tale of Two Lakes - The Geology and Paleontology of the eastern Pinto Basin, Joshua Tree National Park

SATURDAY & SUNDAY, MARCH 18TH. & 19TH. 2017

The 31ST. Annual SDSU Geology Department Alumni Field Trip / Campout will take place in the eastern end of Joshua Tree National Park which is home to iconic granitic monoliths and Joshua tree woodlands. However, few know that vertebrate fossils are also known from the park. The SDSU field trip to the easternmost reaches of this enormous National Park, to the eastern Pinto Basin, will highlight its' complex Neogene and Quaternary tectonic, geomorphologic and rich fossil history. We will take a peek into this little visited area, and discover a geologic story that is framed by regional tectonics, and wetter climates of the past. Recent studies have documented a diverse faunal assemblage and a complex landscape evolution that includes evidence of two ancient bodies of water, one as old as 5 million years, the other, from the Ice Ages. Kathleen Springer, Geologist with the USGS, will be our "Geologic Guide" for this Field Trip. She was trained as a geologist and paleontologist, with B.S. and M.S. degrees from UCR. She was the Senior Curator of Geological Sciences at the San Bernardino County Museum before moving to the USGS. She now focuses on deciphering paleo-depositional environments of Quaternary localities (paleo-wetlands and pluvial lakes) throughout the Mojave Desert and southern Great Basin. She also studies geologic deposits associated with desert wetlands, pluvial lakes, Bouse Fm. and anything else to query the paleoclimate record of the American Southwest. All SDSU Geology students and faculty are encouraged to attend-- especially students. You will be alums one day, so you might as well start giving back now!

<u>SATURDAY MORNING</u>: We will carpool from Corn Springs campground about 9:30 to be at Desert Center at 10:00 AM to meet any late comers about 300' north of frontage road on right side in large open area. From there we head out about 15 miles to the back gate of Joshua Tree where 4-W drive is required to get to our hike departure point. We will leisurely hike about a 2 mile round trip looking at proposed Bouse Fm and the deposition and structure of surrounding strata. As we will be in a National Park no rock collecting is allowed! Please do not jeopardize our Host's reputation. From here we will to return to Corn Springs and relax for the evening.

SUNDAY MORNING: We plan to leave Corn Springs about 9:00 AM and go further up the 4-W Drive road for about a 3 mile hike to look at the Pliestocene lake beds, fossils and some basalt flows adjacent to the lake. We should be headed back to Desert Center by about 3:00 PM.

Center, CA. There are pit toilets, fire rings, some tables and <u>questionable water</u>? Campsites are on a *first-come-first-served* basis. Fees are \$6/car/night (1/2 price with Golden Age Passport.) I will try to get the small group area reserved Friday morning. Bring your own firewood, water, food, refreshments and camping gear. RV's are welcome but it is a very small and tight site and there are no hookups. Except for on-site pit toilets, treat this as a "dry camp" experience. We will try to have someone stay in camp while we are out during Saturday's excursion. Camp GPS coordinates are: 33 37' 34" N, 115 19' 31" W. Temperature ranges average lows in the 50's and highs in the 80's but it could be in the 40's to the 90's!

past Desert Center take the Corn Springs exit, turn right to frontage road and then left (east) on frontage road about 0.6 miles and take the Corn Springs Rd. to right. There are some BLM signs at this intersection. Follow Corn Springs road 8 miles to Campground. It is a fairly good graded road. Look for SDSU Geology signs and flagging. There will be someone in camp Friday afternoon. If the weather is good some may stay until Monday! Top off fuel tanks in Indio or Chiriaco Summit as there are no services in Desert Center. Chiriaco Summit is 30 miles east of Indio and 18 miles west of Desert Center and there is fuel, Mini-mart, coffee shop along with the General Patton Museum which would be an interesting stop on the way home.

Communications Cell phone service is sporadic at Corn Springs Campground depending on your carrier. We will monitor Family Service Radio (FRS) channel 4 (no tone). Call for the SDSU Geology Field Trip Group; remember that FRS radios are limited to a range of just a few miles. We will also monitor Amateur Radio frequency 146.520 Simplex, N6SZO (Joe) and K6GHN (Bill) will be at the campsite early and will be monitoring both frequencies.

As Always Any of you SDSU Geo-Alumni that are interested in becoming involved with our Alumni Activities, such as the Annual Banquet, monthly lunch/planning meetings and Field Trip or, have a special place in mind that would be good for a future Alumni Field Trip, please let me know. Please email or call me if you have any questions regarding this trip. If you think you have a better than 85% chance of attending try to let me know by March 11th so we can have enough handouts for everyone and set up car pools for the trip. 4x4 vehicles will be required on both Saturday and Sunday! If you will not be driving a 4x4 vehicle, please coordinate ridesharing for Saturday and Sunday with me or others that will be driving 4x4 vehicles. Thank You. Joe Corones, SDSU Geology Alumni Field Trip Chairman, icorones@gmail.com, Home-858.484.3582, Cell-858.603.5545.