



PACIFIC SEDIMENTOLOGIST

The Newsletter of the Pacific Section, SEPM (Society for Sedimentary Geology)

vol. 91, no. 1

www.pacificsectionsepm.org

2019 Fall



From the President



Greetings to the PS-SEPM Family,

It's been a while since our last newsletter! Looking back at last year, the 2018 Fall Field Trip along the Black Butte Reservoir in Chico was a huge success! The trip had over 50 attendees, generated 40 new PS-SEPM members, and included another gorgeous guidebook

compiled by Mario Caputo (available for purchase on our website).

The 2018 Garrison Monterey Research Conference was also a success, with over 80 attendees. At the conference, PS-SEPM honored Robert E. Garrison for his lifetime of contributions to science and the science community with the A.E. Fritsche Lifetime Achievement Award. PS-SEPM also recognized Ivan Colburn (CSULA) with the A.E. Fritsche Lifetime Achievement Award. Unfortunately, Ivan left us on July 1, 2018. Ivan was one of my professors at CSULA and I will always remember his passion and dedication to his students and geology.

PSSEPM presented the winner of the Patrick L. Abbott Award for the best graduate student poster to Nick Mitchell, CSU Bakersfield and the John Cooper Memorial Award for best undergraduate poster to Samuel McKinney and co-authors J. Buehler and K. Watson, CSU Bakersfield, at the 2018 PSAAPG Conference. A strong showing for CSUB! The 2019 graduate awards went to Laura C Reynolds, UC Santa Barbara, for Best PhD dissertation, and best MS Thesis awards went to Maia C Davis, CSU Long Beach (1st place) and Ryan M. Weller, CSU Long Beach.

PS-SEPM sponsored a session at the PS-AAPG conference in Long Beach April 2019. Russell Shapiro served as technical chair and PS-SEPM liaison to the conference. We also co-sponsored the AAPG West Coast Student Expo held for the first time at CSUB in October. The Expo was a great success and the awardees can be found on our website.

Lastly, PS SEPM suffered a significant loss with the death of Eric Hendrix, our long-time Newsletter editor, colleague, and friend. Eric passed away on October 10, 2019 after suffering for years with diabetes and resultant kidney failure. Ray Ingersoll and Kevin Coffey will be chairing a session in his memory at the April 2020 PSAAPG Conference in Oxnard. The session is titled "Sedimentary Basins and Tectonics" and abstracts are now being accepted (see page 3). Eric will also be awarded the A.E. Fritsche Lifetime Achievement Award at the 2020 PSAAPG Conference.



Lisa A. Alpert
PS-SEPM President

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Cover Image:

PS-SEPM members examine alluvial deposits of the Tuscan Formation in Big Chico Creek Ecological Reserve during the first day of the 2018 Fall Field Trip. Photo by Lisa Alpert.

The 2019 Pacific Section SEPM Executive Committee



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The 2020 Pacific Section APG/SEPM/SEG Convention is Approaching!



When: 2020 April 4-8

Where: Oxnard, California

Theme: 2020 Vision: Producing Our Future

Abstracts due by 2020 January 10

[Visit the Convention Website](#)

[Submit an Abstract](#)

Join us in Oxnard, California, just an hour north of Los Angeles, at the Embassy Suites Beach Resort, an oceanfront hotel and excellent convention venue. We are currently seeking abstracts for a high quality technical program that covers the broad interests of our members and the geoscience community.

Suggested Topics Include:

- Sedimentary Basins and Tectonics
- Case Studies in Exploration and Development, California and the Pacific Rim
- The Monterey Formation and Similar Strata Across Space and Time
- Source to Sink Studies
- Integrated Studies in Stratigraphy and Sedimentology
- Applied Sedimentology and Paleontology
- Unconventionals and Alternative Resources
- Petrophysics: Applications, Innovations, Images
- Geoscience, Climate, and the Environment
- Aquifers, Underground Injection and Environmental Regulations
- Seismic: Acquisition, 3D Applications, AVO/Inversion, Induced Seismicity
- Structural Geology: Tectonics, HC applications, Earthquakes, Hazards
- Maximizing Recovery: Reservoir Characterization, Models, EOR
- Digital Tools and Big Data Applications

Summary: 2018 Fall Field Trip to Black Butte Reservoir

From Shorelines to Aquifers: Late Cretaceous Through Pliocene Fill of the Northern Sacramento Valley

Trip Leaders: Todd J. Greene, Russell S. Shapiro, David Maloney, and Richard Hilton

2018 September 29-30

Pacific Section SEPM Book 121

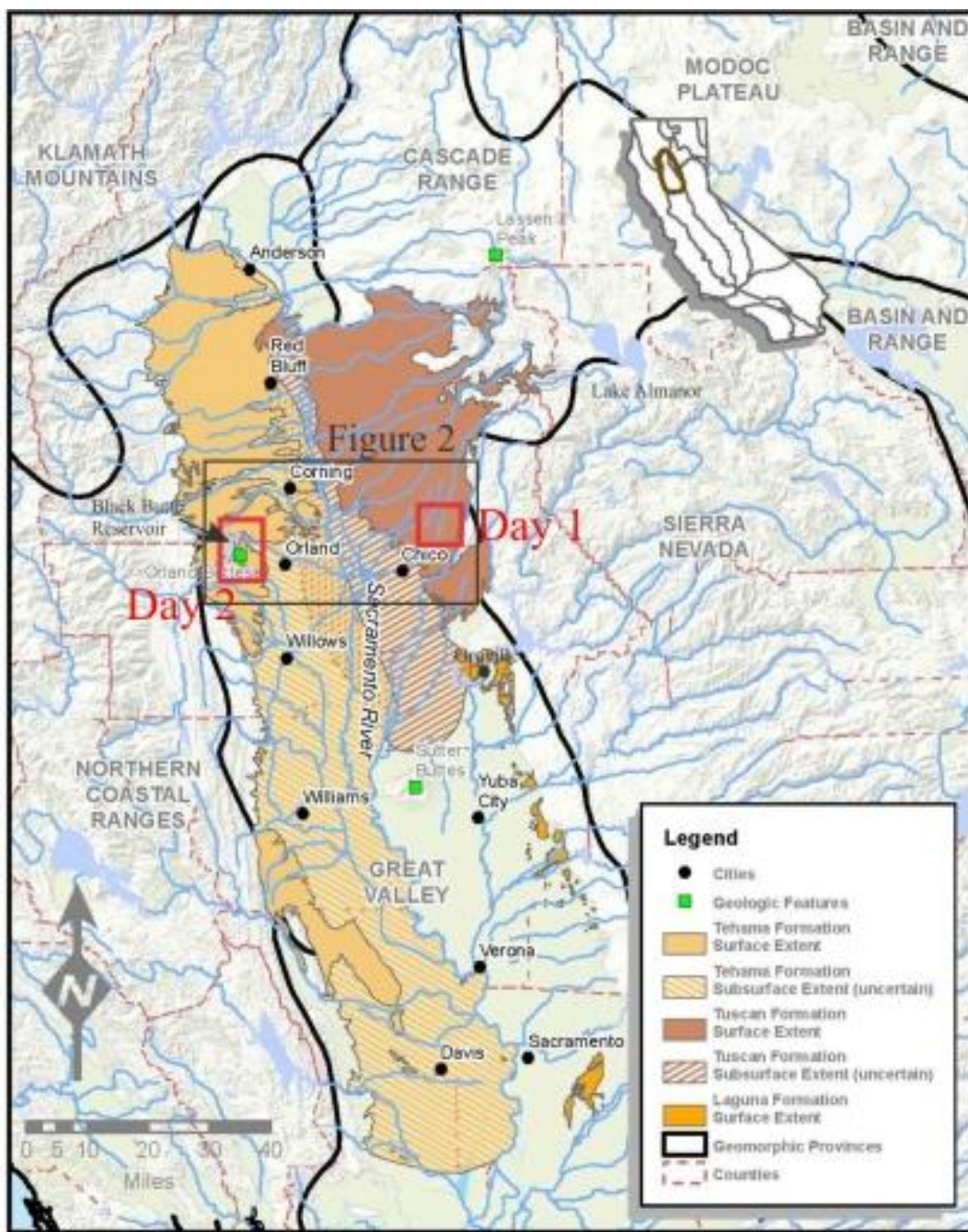
[Purchase the Field Guide](#)



Trip Leaders Todd Greene and Russell Shapiro discuss regional context at the start of Day 1. Photo by Lisa Alpert.

The 2018 PS-SEPM Fall Field Trip took place in September in Chico and along the Black Butte Reservoir, California. We explored the Pliocene and younger aquifer stratigraphy as well as the Upper Cretaceous facies exposed along the flanks of the northern Sacramento Valley. We had a fantastic turn out of nearly 80 people staying two nights at the Buckhorn Campground along Black Butte Reservoir. Typical of PS-SEPM field trips, there was excellent conservation, food, music, and campfire fun, along with great geology and sedimentology. We also took a behind the scenes tour of the world renowned Sierra Nevada Brewery, and visited the Big Chico Creek Ecological Reserve. The main emphasis of the trip was aquifer stratigraphy and sedimentology within the context of the Sustainability Groundwater Management Act and the need to create accurate hydrogeologic

Summary: 2018 Fall Field Trip to Black Butte Reservoir



Map of geomorphic provinces surrounding the northern Sacramento Valley, with outcrop and subsurface distribution of the Tuscan and Tehama formations and outcrops of the Laguna Formation. Location of areas visited during Day 1 and Day 2 are in the red boxes. Modified from DWR (2014). Figure from the field guide (PS-SEPM Book 121).

Summary: 2018 Fall Field Trip to Black Butte Reservoir



Day 1: Pacific Section SEPM members explore the diverse lithofacies of the Pliocene Tuscan Formation (Left), and a variety of fossil samples (Right), in Big Chico Creek Ecological Reserve. Photos by Lisa Alpert.

conceptual models (HCM) for Groundwater Sustainability Plans (GSP). HCMs address the physical and structural characteristics for the groundwater basin being managed. We visited key outcrops of the Pliocene Tuscan and Tehama formations, as well as younger Pleistocene formations. These stops allowed us to learn about the inherent complexity of the aquifer stratigraphy, but also examined how historical mapping efforts have evolved and are still changing how these units are defined and distributed. Day 1 visited sites along the east side of the northern Sacramento Valley where the Tuscan Formation is exposed as debris flow and fluvial deposits. Day 2 included Pliocene, Pleistocene and Quaternary formations mapped near Black Butte Reservoir along the west side of the valley that introduced multiple episodes of cut-and-fill, incised-valley-type stratigraphy. Finally, the Pliocene Tehama Formation has had very few reports of fossils in the literature. The field trip guidebook now serves as the latest repository of Tehama-related fossils to date, which will help better our understanding of how Pliocene climate and tectonics affected the fossil record.

-- written by Todd Greene



(Left) The Pacific Section SEPM tours the Sierra Nevada brewery at the end of Day 1. (Right) Day 2: Trip Leader David Maloney discusses the Pliocene-Pleistocene Tehama Formation. Photos by Lisa Alpert.

2018 Student Awards

John C. Crowell Graduate Award

This award is for the best M.S. thesis and Ph.D. dissertation in sedimentology/stratigraphy.

The award consists of \$500 (\$250 for 2nd place), and a 1-year membership in PS-SEPM.

Best Ph.D. Dissertation:

Laura C. Reynolds, UC Santa Barbara, "The Late Quaternary evolution of the southern California coast: sea-level change, storms, and subsidence"

Best M.S. Thesis, 1st place:

Maia C. Davis, Cal State Long Beach, "Spatial and geochemical characterization of an anomalous, map-scale dolomite breccia in the Monterey Formation, Santa Maria basin, California"

Best M.S. Thesis, 2nd place:

Ryan M. Weller, Cal State Long Beach, "Compositional and diagenetic controls of hardness in siliceous mudstones of the Monterey Formation, Belridge oil field, CA: implications for fracture development"

Raymond V. Ingersoll Undergraduate Award

This award is for the best senior thesis in sedimentology/stratigraphy by an undergraduate student.

The award consists of \$500, and a 1-year membership in PS-SEPM.

Best Undergraduate Thesis:

Aria R. Blumm, Occidental College, "Reconstructing earthquake events on the Teton Fault, WY"

In Memoriam: Eric Hendrix



PS-SEPM has lost a longtime supporter, contributor, and friend. It is with a heavy heart that we announce the passing of Eric Hendrix on 10 October 2019. Eric was a senior consultant for Earth Consultants in Santa Ana and a strong supporter of students and the geosciences.

“Eric was a great guy, always contributing positive energy to the group! I really enjoyed working with him and was amazed about his extensive knowledge on California geology, whether it was sedimentology, tectonics, structural geology, or his main expertise, hydrogeology. I had many great conversations on the Monterey Formation with him and he shared a lot of his books with me that helped me during my times as a student.” – Yannick Wirtz

“Eric was a really warm, big-hearted guy and a heck of a good geologist. I think that all of us benefited from knowing him. My connections with him were primarily through the Pacific Section SEPM where he was a long-time, strong and reliable contributor and colleague.” – Rick Behl

“Eric had a big heart and he cared deeply for PS-SEPM.” – Mario Caputo

“Eric was one of the most self-motivated, enthusiastic graduate students I supervised. He was a true scholar who investigated all sources of knowledge, which he merged with his excellent observations to produce innovative and solid syntheses. He was a pleasure to work with, both personally and professionally. He will be missed by many.” – Ray Ingersoll

Rest in Peace, Eric. You will be missed.

A session will be held in Eric’s honor at the 2020 PS-AAPG/SEPM/SEG annual meeting, titled: “Sedimentary Basins and Tectonics.” The deadline for abstracts is January 10th.

PS-SEPM Website

For announcements, field-trip summaries, newsletters, and more,
and to contact or join PS-SEPM, go to:

www.pacificsectionsepm.org

PS-SEPM Membership

PS-SEPM members: Renew your membership for 2020 today!

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