The objective of the Society is to promote the knowledge and understanding of Earth science, and its application to human needs

**March Meeting – All are always invited!**

**Thursday, Mar. 21, 2019, 6:30 p.m.**

*social time 6:30 p.m., program at 7:00*

Shepherd of the Hills Church, 11500 W. 20th Ave., Lakewood

**A Cook’s Tour of Colorado’s Glacial Landscape**

**Dr. Vince Matthews**

This is probably not the first time you have seen a similar image of these majestic peaks. Hordes of people ride the bus each summer to gaze upon the iconic Maroon Bells. But, how many of them realize that one reason they are so spectacular is because the bells are framed by a U-shaped glacial valley with faceted spurs and hanging valleys along its sides? And—how many of those realize that the valley was once filled with nearly 2,000 feet of ice? And—how many notice the rock glacier pouring out of the hanging valley below North Maroon Peak? And—how many of those realize that the rock glacier is flowing at 2.2 feet per year?

Throughout most of Earth history, glaciers did not exist on Earth. We are fortunate because we live in a time when glaciers reside on nearly every continent, even though we are in a warmer interglacial stade. Why is this a big deal?

---cont. next page---
Without glaciers to observe elsewhere on Earth, we might not be able to figure out what caused some of our most interesting landforms in Colorado. Suppose alpine glaciers did not exist on Earth today. Would we then be smart enough to propose that some valleys in Colorado had once been filled with ice thicker than the One World Trade Center is tall (1,776’)? …

Dr. Vincent Matthews III has had a long and varied career in geology, in industry and academia. He was the Colorado State Geologist and Director of the Colorado Geological Survey from 2004-2012. Vince was the author of *Messages in Stone, Colorado’s Colorful Geology* (two editions, 2003 and 2009). Though he now resides in Wisconsin, Vince is on the Board of Directors of the National Mining Hall of Fame and Museum, Leadville, CO; he writes a periodic blog via Facebook on “Leadville Geology”, and he is working on a forthcoming book, “Land of Ice: A Guide to Colorado’s Glacial Landscape”.

**A peek at our upcoming meetings & field trips in 2019: “Save the Dates!”**


**Tuesday, May 14**, Colo. Sci. Soc annual Emmons Lecture and May meeting, to take place in conjunction with a 2.5-day USGS-CSM-CGS joint Mineral Resources Forum. The lecture will be a presentation by Dr. Mark Barton, Univ. of Arizona, Lowell Institute for Mineral Resources. Mark's presentation title and the exact location (on the CSM campus) are still TBA. More info will be forthcoming!

**Sunday, May 19**, CSS Spring Field Trip: “Quaternary Geology of the Denver Basin”. “A one-day field trip (about 9 a.m. to 4 p.m.) starting at the Morrison exit/Woolly Mammoth Park & Ride, with 4 to 6 field stops relating to the Quaternary/Pleistocene geology of the Denver Basin. The trip will include a visit to the Magic Mountain archeological site, which has recently been in the news because of recent excavations by DMNS.

**Sat.-Sun., Sept. _____** (exact weekend date still TBD), *Geology and Geoheritage of the Florissant-Cañon City-Florence area*; a two-day field trip with an overnight in Cañon City. “Florissant Fossil Beds Nat. Mon.; Skyline Drive; Royal Gorge; Florence coal, oil, and gas basin; Cope-Marsh quarries.”

**Fall 2019 CSS planned meeting dates:** Sept. 19, Oct. 17, Nov. 21, Dec. 19. Details to come.

**Colorado Scientific Society dues** are $25 for regular members, $20 if dues renewals are paid before Jan. 31 of each year, $10 for corresponding members (outside the Colorado Front Range area) and only $5 for students. A Lifetime Membership is now available, for $395.00. Mail a check to the CSS or pay with a credit card using PayPal on the CSS website. Please contact CSS Treasurer Don Sweetkind at 303-236-1828 or dsweetkind@usgs.gov if you are uncertain of your dues or membership status. Extra payments to contribute to our Memorial Funds or Endowment Fund are always most welcome; you’ll see a list of them on the membership form attached to this newsletter, or see our website at [http://coloscisoc.org/membership-payment/](http://coloscisoc.org/membership-payment/). Or see [http://www.coloscisoc.org](http://www.coloscisoc.org). To pay by mail, send payments to: Colorado Scientific Society, P.O. Box 150495, Lakewood CO 80215-0495
Calendar of Coming Events

Through March 31: The Conifer Historical Society hosts a special exhibit on “Mining in Jefferson County” at Conifer’s “Little White School House” meeting place at 26951 Barkley Road, Conifer. The exhibit will be open (no admission charge; donations accepted) just one day a week, every Sunday from 11 a.m. to 3 p.m. The exhibit/display are really superb and I’m sure you will enjoy seeing it! There are only 2 more Sundays to see this exhibit, 3/24 & 3/31. For more information about the Historical Society and the exhibit, see https://www.coniferhistoricalsociety.org/events/.

Wed., Mar. 20, 4:00 p.m., University of Colorado Earth Sciences Colloquium. “Glaciers”, by Ian Willis, Cambridge. Benson Earth Science Building, Room 180, all are welcome; refreshments follow.

Thurs., Mar. 21, 4:00 p.m., Colorado School of Mines Van Tuyl Lecture. Reconstructing Deep Ocean Circulation during Cenozoic Climate Transitions from the Marine Sediment Record, by Brian Romans, Virginia Tech; 241 Berthoud Hall, all are welcome.

Thurs., Mar. 21, 7:00 p.m., “A Cook's Tour of Colorado's Glacial Landscape” by Dr. Vince Matthews. Monthly meeting of the Colorado Scientific Society, Shepherd of the Hills Church, 11500 W. 20th Ave., Lakewood; all are welcome.

Fri.-Sat.-Sun., Mar. 22-24, Fort Collins Gem & Mineral Show: at Thomas M. McKee Building, at The Ranch/Larimer County Fairgrounds, 5280 Arena Circle, Loveland, CO (I-25 exit 259); hours 4-8 Fri., 9-6 Sat., 10-5 Sun. Sponsored by the Fort Collins Rockhounds Club.


Mon., Apr. 1, 7:00 p.m., The Leadville Limestone-The Magic Rock of Central Colorado, by Ed Raines, Collections Manager, Colorado School of Mines Geology Museum; at the Western Interior Paleontological Society meeting, Lowry Conference Center 1061 Akron Way, Denver.

Tues., Apr. 2, 10:30 a.m., USGS Rocky Mountain Science Seminar, “Dynamics of mud volcanoes and geysers”, by Max Rudolph, Univ. of California-Davis. Building 25 auditorium, Denver Federal Center; visitors are welcome. Enter Building 25 at entrance E-14, by the security guard’s station.

Wed., Apr. 3, 3:00 p.m., Denver Museum of Nature & Science, Earth Sciences Colloquium, “The evolution of plant-mite mutualisms: Clues from the DMNS collections”, by Gussie MacCracken, Univ. of Maryland. VIP Room, DMNS; all are welcome, museum admission is not required.

Fri., Apr. 5, 3:00 p.m., Denver Museum of Nature & Science, Earth Sciences Colloquium, “Exceptional fossils in carbonate concretions: Why they form and what they can tell us”, by Tory McCoy, Univ. of Leicester. VIP Room, DMNS; all are welcome, museum admission is not required.

Fri., Apr. 12, 6:45 p.m., North Jeffco Gem & Mineral Club Silent Auction; all welcome (setup begins at 5:30). APEX Community Recreation Center, 6842 Wadsworth Blvd., Arvada. For more info, Bill Jones, 303-503-6288


Sun., May 19, Friends of Mineralogy, Colorado Chapter, Silent (+Vocal) Auction. Noon to 4 p.m., Clements Community Center, 1580 Yarrow St., Lakewood CO. All are welcome to attend.

For more lecture series during the year see:

Colorado Beer Talks (2nd Tuesday, 6-8 p.m.), Windy Saddle Café, 1110 Washington Avenue, Golden, “Golden’s grassroots version of TED talks, Expand your mind with a beer in your hand”, http://goldenbeertalks.org/

Colorado Café Scientifique in Denver, monthly lectures on science topics held either at Blake Street Station or Brooklyn’s, Denver; open to the public, no charge other than refreshments you may choose to purchase; see http://cafescicolorado.org/ .

Colorado Scientific Society (3rd Thursday, 7 p.m.), see http://coloscisoc.org/ . Meets at Shepherd of the Hills Church, 11500 W. 20th Ave., Lakewood CO, except when noted.

CU Geological Science Colloquium (Wednesdays, 4 p.m.) see http://www.colorado.edu/geologicalsciences/colloquium

CSU Dept. of Geoscience Seminars (Fridays, 4 p.m.), see https://warnercnr.colostate.edu/geosciences/geosciences-seminar-series/

Van Tuyl Lecture Series, Colorado School of Mines, (Thursdays, 4 p.m.): https://geology. mines.edu/events-calendar/lectures/

Denver Mining Club (Mondays, 11:30), see http://www.denverminingclub.org/ .

Denver Museum of Nature and Science, Earth Science Colloquium series, 3:00-4:00 p.m., VIP Room unless noted, day of the week varies. Museum admission is not required; see http://www.dmns.org/science/research/earth-sciences/

Denver Region Exploration Geologists Society (DREGS; 1st Monday, 7 p.m.), http://www.dregs.org/index.html

Florissant Scientific Society (FSS); meets monthly in various Front Range locations for a lecture or field trip; meeting locations vary, normally on Sundays at noon; all interested persons are welcome to attend the meetings and trips; see http://www.fss-co.org/ for details and schedules.

Nerd Night Denver is a theater-style evening featuring usually 3 short (20-minute) TED-style talks on science or related topics; held more-or-less monthly at the Oriental Theater, 4335 W. 44th Ave., Denver; drinks are available; for ages 18+. Admission is $6 online in advance, $10 at the door. See https://www.nerdnitedenver.com/ .

Rocky Mountain Map Society (RMMS; Denver Public Library, Gates Room, 3rd Tuesday, 5:30 p.m.). http://rmmaps.org/

Western Interior Paleontological Society (WIPS); beginning January 2019, WIPS will meet on the 1st Monday of the month, 7 p.m., at Lowry Conference Center, 1061 Akron Way, Denver. See http://westernpaleo.org/ .
2019 Colorado Scientific Society Officers, Councilors, and Committee Chairs

Officers
President......................... Tom Casadevall, tcasadev@gmail.com, 720-244-7052
President-elect .................. Jim Paces, jamespaces@comcast.net
Past President..................... Bob Raynolds, bob.raynolds@dmns.org
Secretary........................... Lisa Fisher, 303-215-0480, lisa.fisher@alumni.mines.edu
Treasurer.......................... Don Sweetkind, 303-236-1828, dsweetkind@usgs.gov, or
dsweetkind@gmail.com

Councilors
2017-2019: Jim Reed, jim@rockware.com
2017-2019: Chris Morrison, chris-morrison@comcast.net
2018-2020: Pete Modreski, pmodreski@aol.com, 720-205-2553
2018-2020: Matt Rhoades, roadesgeol1@gmail.com
2019-2021: Linda Barton Cronoble, lbarton1611@gmail.com, 720-338-1237
2019-2021: Yvette Kuiper, ykuiper@mines.edu, 303-273-3105

Committee Chairs
Database Manager: Paul Morgan, 303-384-2648, morgan@mines.edu
Field Trip Chair: Cal Ruleman, 303-236-7804, cruleman@usgs.gov
GSA Meeting Co-chairs, Lisa Fisher & Libby Prueher
History Chair: Beth Simmons, cloverknoll@comcast.net
Hospitality Chair: Mary-Margaret Coates, geotechedit@gmail.com
Membership Chair: Bob Raynolds, bob.raynolds@dmns.org
Newsletter & Publicity: Pete Modreski, office 303-202-4766, cell 720-205-2553, pmodreski@aol.com
Outreach: Linda Barton Cronoble, lbarton1611@gmail.com, 720-338-1237
Past Presidents’ Best Paper Award: Bob Raynolds, bob.raynolds@dmns.org
State Science Fair Awards: Chuck Weisenberg, 303-238-8806, cweisnbrg@msn.com
Student Programs Chair: Melissa Foster, melissa.ann.foster@gmail.com, 707-498-2484
Student Research Grants Chair: Bob Raynolds, bob.raynolds@dmns.org
Webmaster: Chris Morrison, chris-morrison@comcast.net

* * * * * * * * * * * * * * * * * * * * * *

The CSS website is www.coloscisoc.org. Anyone can also view our facebook page, whether you have a
facebook account or not, at https://www.facebook.com/groups/511533159044226/. If you use facebook—
please go there and “like” the CSS! (Just search there for Colorado Scientific Society.)

And once more: to pay dues online, please go to:
http://coloscisoc.org/membership-payment/

Thank you!