



# Colorado Scientific Society

Newsletter of the Society

April-May 2020

## No meetings are immediately planned

Dear Colorado Scientific Society Members,

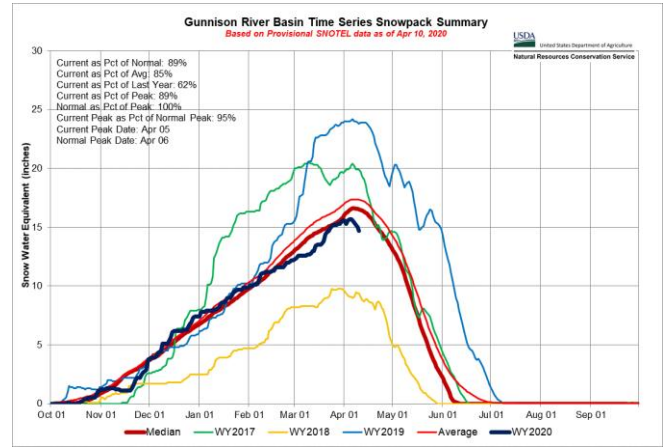


I hope this newsletter finds you healthy and safe as the COVID pandemic reaches its height here in Colorado. It was with substantial regret that the CSS Council decided last month to cancel or postpone all in-person activities for the remainder of the Spring. In retrospect, this was the right call made prior to full stay-at-home order implemented by Governor Polis. Since then, we have all had to cope a new way of doing things that keeps us safely separated and contagions in check, especially for our members in the high-risk category. We hope we can gather again in the Fall, starting with a Family Day and picnic at Dinosaur Ridge in August (date to be announced, if this proves to be do-able) followed by our rescheduled Past Presidents Dinner set for Thursday, September 10<sup>th</sup> at the Mount

Vernon Canyon Club, at which Tyler Lyson and Ian Miller of the Denver Museum of Nature and Science will present a summary of their work on biotic recovery after the K-Pg mass extinction event. We will run a field trip to see the site of their work at the Corral Bluffs Open Space near Colorado Springs later that month.

Despite the cancellation of CSS public events, the Council continues to hold monthly meetings via telephone and/or internet venues. Among other discussion topics, the Council is working on organizing a fresh batch of clothing items featuring the CSS logo that will be available for purchase at meetings this fall. We also discussed our Student Research Grant Program and its sustainability in this and future years. Monetary awards for this very beneficial program are generated from the interest accrued on our Memorial Fund investments established through gifts in memory of a number of notable past CSS members (<https://coloscisoc.org/grants/>). Interest typically provides us with ~\$11,000 to use in this manner. Tom Casadevall, our 2019 president, spearheaded the effort to evaluate the 26 proposals submitted from students across the country for thesis projects covering a wide variety of geologic problems in the Rocky Mountain west. The proposals were all of high quality, making the ranking effort difficult. Ultimately the Awards Committee granted funding to 20 students at levels between \$500 and \$1000. Awards totaled just over \$14,000, which was made possible, in part, by savings on meeting space at Berthoud Hall this year (CSM is graciously offering this space to the Society at no charge). Names and titles of the funded proposals will be posted soon on the CSS website.

As a consequence of canceling the March CSS meeting, we missed hearing Jon Lovekin of the Colorado Geological Survey describe the results of his work on the extraordinary 2019 season of snow avalanches near Lake City in Hinsdale County, CO. Much of this snow came as heavy accumulations in March and April of that year as seen in the plot of SNOTEL snow-water equivalence for the Gunnison River Basin. In comparison, the 2020 snow pack in the same basin is tracking close to average. Although it doesn't look like we can squeeze Jon's talk into our Fall schedule, we are hoping he will be back sometime next winter to describe his snowy tale.



<https://www.wcc.nrcs.usda.gov/ftpref/states/co/charts/basinplot/grb20.gif>

---Jim Paces, CSS President

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**Upcoming CSS Meetings:**

Beginning January, 2020, the normal meeting place of the Colorado Scientific Society has been in Berthoud Hall, Room 241, Colorado School of Mines campus. Of course, we've only been able to hold two meetings there, since our March, April, and May meetings were cancelled due to the coronavirus pandemic.

**Our tentative/hopeful CSS meeting schedule for the remainder of 2020 will be:**

The CSS co-sponsored **Symposium on Water and Energy**, to have been held in Ricketson Auditorium, Denver Museum of Nature and Science on May 16, has been cancelled/postponed. We hope to reschedule it for some time in 2020 or 2021.

August (tentative depending on how things "open up", probably questionable), a CSS family visit day to Dinosaur Ridge, Morrison, CO. We shall see if this can really happen—we'll stay in touch!

Thurs., Sept. 10, **Rise of the Mammals: Exceptional Continental Record of Biotic Recovery after the Cretaceous–Paleogene Mass Extinction** (about the Corral Bluffs fossil mammal find), by Ian Miller and Tyler Lyson, Denver Museum of Nature and Science; at the **CSS Annual Past Presidents' Dinner**, to be held at the **Mount Vernon Canyon Club**

Sept. \_\_\_\_\_ (perhaps, 12, 19, or 26, if we are able) a **CSS Field Trip to Corral Bluffs, Colorado Springs Open Space, A Record across the Cretaceous-Paleogene Mass Extinction**. A field trip for CSS, to be led by Sharon Milito, Colorado Springs educator and open space volunteer; some DMNS staff may also participate. The trip will be limited to 20 people; Cal Ruleman will be the CSS field trip coordinator.

Thurs., Oct. 15, **CSS Annual Emmons Lecture: Cosmic Dust, Stardust, and Comet Dust**, by Mike Zolensky, NASA Johnson Space Center; *Meeting location TBA*

Thurs., Nov. 19, program topic to be confirmed

Thurs., Dec. 17, **CSS Annual Meeting, Potluck Dinner, and President's Address**; meeting place TBA

**May 2020 “Where is this rock?”**



Our popular feature returns this month! In keeping with our state’s stay-at-or-close-to-home policy, I will just say that this nice stream feature is, well, let’s say it’s within 10 miles of the Denver Federal

Center. Write and tell us where exactly you think it is, and of course, what the rocks are that this stream is cascading over. Write to me (Pete) at pmodreski@usgs.gov or (I’ll probably see it sooner at) pmodreski@aol.com.



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**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 just \$5 for students. A Lifetime Membership is 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 status. Extra donations 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/> . To pay by mail, send payments to: **Colorado Scientific Society, P.O. Box 150495, Lakewood CO 80215-0495**

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***2019 Colorado Scientific Society Officers, Councilors, and Committee Chairs***

**Officers**

- President..... Jim Paces, U.S. Geological Survey, jamespaces@comcast.net
- President-elect ..... Bruce Trudgill, Colorado School of Mines, btrudgil@mines.edu, 303-273-3883
- Past President..... Tom Casadevall, tcasadev@gmail.com, 720-244-7052
- 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**

- 2018-2020: Pete Modreski, pmodreski@aol.com, 720-205-2553
- 2020: (*appointed to fill the last year of a vacated term*) Scott Minor, USGS
- 2019-2021: Linda Barton Cronoble, lbarton1611@gmail.com, 720-338-1237
- 2019-2021: Yvette Kuiper, Colorado School of Mines, ykuiper@mines.edu, 303-273-3105

2020-2022: Chris Morrison, chris-morrison@comcast.net

2020-2022: Joe Sertich, Denver Museum of Nature & Science, Joe.Sertich@dmns.org, 303-370-6331

### Committee Chairs

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/Refreshments Chair: OPEN

Membership Database Manager: Don Sweetkind, 303-236-1828, dsweetkind@gmail.com

Newsletter & Publicity: Pete Modreski, office 303-202-4766, cell 720-205-2553, pmodreski@aol.com

Outreach: OPEN

Past Presidents' Best Paper Award: Tom Casadevall, tcasadev@gmail.com

State Science Fair Awards: Chuck Weisenberg, 303-238-8806, cweisnrg@msn.com

Student Programs Chair: Melissa Foster, melissa.ann.foster@gmail.com, 707-498-2484

Student Research Grants Chair: Tom Casadevall, Past Pres., tcasadev@gmail.com

Webmaster: Chris Morrison, chris-morrison@comcast.net

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Dr. David Krause of DMNS wrote to tell us about the free, virtual presentation he is giving this Wednesday, May 6, about their discovery of *Adalatherium hui*, "The Crazy Beast of Madagascar". Below is David's note and invitation. As you'll read, you must RSVP to the Museum at the link below by noon on Wednesday to receive a return email with the link to the 7 p.m. Zoom meeting.

### **Beyond Bizarre: The Crazy Beast of Madagascar**

**Wednesday, May 6, 7 p.m., Free**

An international team of scientists led by David Krause, senior curator of vertebrate paleontology, have discovered a new fossil mammal, *Adalatherium hui*, from the island of Madagascar. First published in the prestigious scientific journal *Nature*, this new mammal is represented by an articulated and well-preserved skeleton, the most complete for any mammal from the entire Mesozoic of the southern hemisphere. *Adalatherium*, which literally means "crazy beast," belongs to a lesser known group of mammals called gondwanatherians that previously were represented by only a single skull and isolated jaws and teeth. The skeleton has many features that are uniquely bizarre, consistent with a history of isolation on the island of Madagascar for over 20 million years. Join Krause for a live presentation about this amazing discovery and learn how his work in Madagascar inspired him to give back to the local community. Please RSVP by noon on May 6 to receive a link to the live Zoom broadcast. Registration will close at that time. Links will be emailed by 5 p.m. on May 6. <https://secure1.dmns.org/beyond-bizarre-the-crazy-beast-of-madagascar>



[Denver Museum of Nature & Science Online Ticketing Store | Beyond Bizarre: The Crazy Beast of Madagascar](https://secure1.dmns.org/beyond-bizarre-the-crazy-beast-of-madagascar)

May 6, 2020 - 7:00 p.m. - 8:00 p.m. An international team of scientists led by David Krause, senior curator of vertebrate paleontology, have discovered a new fossil mammal, *Adalatherium hui*, from the island of Madagascar.  
secure1.dmns.org

Additional information on the discovery and the talk can be accessed at <https://www.dmns.org/science/earth-sciences/projects/marooned-on-mesozoic-madagascar/>

The CSS website is [www.coloscisoc.org](http://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.)

*To pay dues online, please go to:*

<http://coloscisoc.org/membership-payment/> *Thank you!*

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## *Calendar of Coming Events*

**Fri.-Sun., Sept. 18-20, 53<sup>rd</sup> Annual Denver Gem and Mineral Show**, at the Denver Mart. 2020 theme is “Fabulous Fluorite”.

*Want to read an interesting article?* [Caldera chronicles: Ken Pierce helped unraveled Yellowstone's geologic complexities](#) appeared in the Missoulian Online, May 1, 2020. The above “hot link” will take you to the article, written by Lisa Morgan and Pat Shanks, emeritus research geologists with the USGS, plus 3 other coauthors. Ken Pierce, a USGS Scientist Emeritus, is a longtime CSS member and a past CSS President (1999).

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*For more lecture series during the year (once they begin again!) see:*

**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** (3<sup>rd</sup> Thursday, 7 p.m.), see <http://coloscisoc.org/>. Meets at Berthoud Hall Room 241, CSM campus, Golden, except when noted otherwise.

**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 Sciences M. Ray Thomasson Colloquium series**, 3:00-4:00 p.m., VIP Room unless noted, meeting dates and day of the week vary. Museum admission is not required;

see <https://sites.google.com/view/dmnsdes2020colloquiumschedule/home>

**Denver Region Exploration Geologists Society (DREGS)**; usually 1<sup>st</sup> Monday, 7 p.m., Room 241 Bethoud Hall, CSM campus, Golden; <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.

**Friends of Mineralogy, Colorado Chapter**, usually meets on the 2<sup>nd</sup> Thursday of odd-numbered months, 7:30 p.m., Berthoud Hall Room 108, CSM campus, Golden; see <https://friendsofmineralogycolorado.org/>.

**Golden Beer Talks** (2<sup>nd</sup> Tuesday, 6-8 p.m.), at the Buffalo Rose, 1119 Washington Ave., Golden. Doors open at 6; Talk begins at 6:35; Intermission – 7-7:15; Q&A/clean up 7:15-8. “Golden’s grassroots version of TED talks, Expand your mind with a beer in your hand”, <http://goldenbeertalks.org/>

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

**Western Interior Paleontological Society (WIPS)**; beginning January 2020, WIPS will meet on the 1<sup>st</sup> Monday of the month, 7 p.m., in Petroleum Hall, Green Center, 924 16<sup>th</sup> St., Colorado School of Mines campus, Golden See <http://westernpaleo.org/>.