



Colorado Scientific Society

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

CSS Newsletter, January 2021

Snowmastodon Fossil Dig: A Love Story

(via Zoom) Thursday, January 21, 2021

***Christian and Becky Shorey, Colorado School of Mines
and Jefferson County Public Schools***

Join Zoom meeting after 6:45 Mountain Time
Meeting and Program begin at 7:00

Click to Join CSS Zoom Meeting
from PC, Mac, Linux, iOS or Android

<https://mines.zoom.us/j/93339859412?pwd=U09ObDNZOElYzMtRtMEtsdUowQnJqdz09>

Meeting ID: 933 3985 9412

Password for meeting, if needed: **607963**

***Abstract:** In 2010 workers at the Snowmass Department of Water and Sanitation discovered a mammoth while digging a new dam for water storage. Members of the Denver Museum of Nature and Science rushed to the site and were able to uncover ice-age bison, and mastodon fossils before the ground froze as the calendar turned to 2011. With the spring thaw, volunteer crews working with DMNS dug an enormous fossil trove in a constrained seven week period. Christian and Becky, newly engaged, joined weeks 3 and 5, and using video shot by Christian and Becky's photos, this talk will summarize what they saw and learned in that time. We will take you back to the last glacial period and into the previous interglacial times of alpine Colorado, and even future possibilities.*



Snowmastodon site beside the Snowmass Ski Area



Crew digging out a tusk at the Snowmastodon site



Christian V. Shorey is a Teaching Professor and Assistant Department Head, Geology and Geological Engineering, Colorado School of Mines.

EDUCATION

- Ph.D., University of Iowa, Geoscience 2002
- B.S., University of Texas, Austin, Geology, minor in zoology 1993

RESEARCH PROJECTS

- Modeling the climatic controls on speleothem growth and isotopic incorporation
- Regional paleoclimatic reconstructions using speleothems and other proxies

TEACHING INTERESTS

- Head instructor for SYGN 101, Earth and Environmental Systems Science
- Future plans for courses in meteorology, climatology, and evolution
- [Earth and Environmental Science Podcast](#)



Becky Shorey is a Google Certified Trainer and Innovator and piloted a 1:1 Chromebook classroom for four years. In her 18 years of teaching, she has taught high school Earth Science, Environmental Science, Unified Science, and Astronomy at Green Mountain High School in Lakewood, CO. Her last 3 years at GMHS were working as an EdTech Mentor, where she trained faculty and students on the use of Chromebooks and usage of the Google Apps tools available. She worked one on one with teachers developing customized lessons integrating technology into their classrooms in creative ways to allow for student choice, creativity and increased critical thinking skills.

The first year as an EdTech Mentor/ Coach, she planned and implemented a 1:1 program for the school, starting with the Freshman class. With all those new Chromebooks came a lot of repairs and Becky developed a Student Chromebook Repair Team where students are in charge of identifying the problem, fixing it and keeping track of inventory

and billing.

As Jeffco is preparing to move to being a 1:1 school district in the fall of 2019, Becky has moved into an administration role as Manager of Strategic Projects for Jeffco Schools where she is helping a team plan for, deploy and support teachers with the Chromebook deployment.

Becky has been married to her husband since 2011 and has 2 daughters. She is passionate about the environment, mountain biking, camping and loves going on fossil digs. She was a volunteer at the Denver Museum of Nature and Science in the Paleontology Prep Lab for several years and went on a few digs including Snowmass, CO which turned out to be one of the world's largest ice age fossil discoveries. Becky grew up in Southeastern Pennsylvania and moved to West Virginia and Utah before finally settling in Colorado where she finished up her degree in Earth and Atmospheric Science at Metropolitan State College of Denver.

You can read more about all CSS programs on our website, <https://coloscisoc.org/> .

Recent CSS presentations are recorded on Zoom. Follow the links on the website for each presentation to see abstracts, biographies of the speakers and video recordings of our meetings. [Note: Please ignore the “Transcript”. It is wrong too often. Just listen to the video!]

Future Colorado Scientific Society Meetings and Field Trips

Our meetings will be virtual for the next months because of the COVID-19 pandemic.

We normally meet at The Colorado School of Mines, but CSM has closed the use of its facilities by outside groups. CSM currently says: “Events are closed to the public and considered ‘private’ (open only to the Mines community)”.

Other organizations’ upcoming meetings:

Wed., Jan. 20, 7:00-8:00 p.m. The Denver Museum of Nature and Science is presenting a virtual program on Digital Earth: Ice. Prepare for a trip to Himalayan glaciers, chilly fjords, and the frigid coast of Antarctica. Geologist Bob Raynolds and Ka Chun Yu, curator of space science, will guide you through landscapes defined by snow and ice, which are also increasingly affected by rising global temperatures. Free members, \$8 nonmembers. <https://www.dmns.org/virtualofferings/> .

Sun., Feb. 21, 1:00 p.m. “Timing of the uplift of Pikes Peak and the demise of Lake Florissant”, by Ned Sterne. A Zoom presentation for the Florissant Scientific Society; all are welcome to attend. Details will be posted at <https://www.facebook.com/FlorissantScientificSociety/> or... well, I’ll be keeping you all informed.

We invite you to pay your dues for 2021 to CSS! You may pay dues online, or print out a pdf of the membership form and mail it to us with a check. Continuing your membership in CSS will enable us to continue all our ongoing programs, including our field trips, virtual meetings, Student Research Grants, and more.

See <https://coloscisoc.org/join-donate/> for the online link to our membership & dues form. Regular CSS dues are \$25 (paid after Jan. 31; \$20 if paid before the end of January); Corresponding Membership (outside of the Front Range area) \$10; Student Membership (any level) \$5; Life Membership, \$395. Send your membership payment, if not done online through PayPal, to Colorado Scientific Society P.O. Box 150495 Lakewood, CO 80215-0495.

Thank you!

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At the Dec. 17 Annual Meeting, it was announced that the **CSS 2020 Best Paper Award** was given jointly to the two co-presenters, Ian Miller and Tyler Lyson, for their presentation at our September meeting, “Rise of the Mammals: Exceptional Continental Record of Biotic Recovery after the Cretaceous–Paleogene Mass Extinction”.

The Colorado Scientific Society slate of officers and councilors for 2021, presented and approved by “virtual show of hands” at our Annual Meeting, is:

President, Bruce Trudgill, Colorado School of Mines

President-elect, Ned Sterne, consulting geologist

Past-president, Jim Paces, U.S. Geological Survey

Secretary, Lisa Fisher, Escalante Mines, Inc. (incumbent)

Treasurer, Don Sweetkind, U.S. Geological Survey (incumbent)

Councilors: 2019-2021: Linda Barton Cronoble (incumbent)

2019-2021: Yvette Kuiper, Colorado School of Mines (incumbent)

2020-2022: Joe Sertich, Denver Museum of Nature & Science (incumbent)

2020-2022: Warren Day, U.S. Geological Survey (incumbent)

2021-2023: Lew Kleinhans, independent geologist

2021-2023: Karen Berry, Director, Colorado Geological Survey

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Where’s that rock? This once-regular feature of our newsletter appears to have become a casualty of covid, as it has not appeared in quite a while. [Actually, I think it was originally a casualty of the Dec. 2018-Jan 2019 35-day U.S. government shutdown, and never quite recovered from that.] Let me resurrect it! Here is a photo for you. Who can tell us where this is, and for extra credit, what are the ages of the rock strata visible here? (Hint—it’s not necessarily in Colorado.) Email your answer to the newsletter editor, Pete Modreski, pmodreski@aol.com .

