



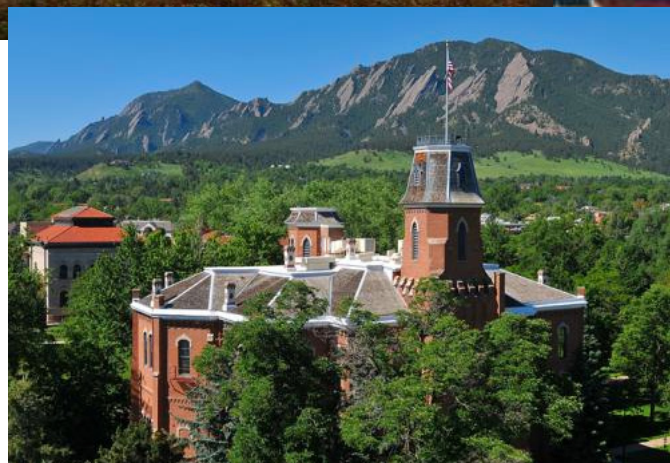
Colorado Scientific Society

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

2012 CSS Annual Student Night Competition



We're taking the competition
to the students!



NOT
Wednesday!!

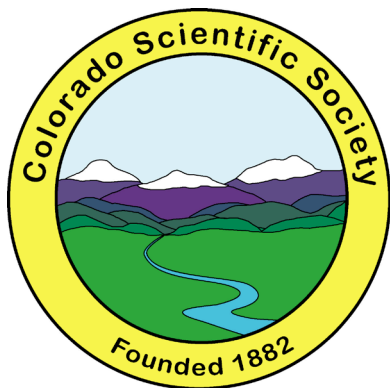
→ **Thursday, October 18, 2012**

Benson Earth Science Building,

CU campus, Boulder

← **DIFFERENT
LOCATION!!**

Social half-hour—6:30 p.m. Meeting time—7:00 p.m.



Colorado Scientific Society

2012 Student Night Competition

Call for Abstracts

Abstract Submittal Deadline Friday October 12th
Presentations to be given Thursday, October 18th

Students -- Practice your talk! Win cash prizes!

The Colorado Scientific Society invites students at regional colleges to submit abstracts to speak at the Society's Student Night Competition at our October 18 meeting to be held at the Benson Earth Science Building, CU campus, Boulder. From the submitted abstracts, *at least* four papers will be selected for oral presentation. At the October meeting, the invited students will speak and the talks will be ranked on the basis of scientific merit and quality of the presentation. Each speaker will receive an honorarium to help defray some of the costs of their research and academic study. (In recent years, prize money awarded has totaled \$750–\$850!)

Students presenting posters at GSA or other meetings are welcome to submit an abstract to student night. We will hang your posters and view them as part of the competition.

Papers are invited from all areas of the Earth Sciences and need not deal with a Colorado or Rocky Mountain theme. Papers that have been, or will be, presented at GSA, AAPG, or other professional meetings are welcome, although the work described and presented must clearly be conducted by the student, not an advisor's work in which the student plays a minor role. Abstracts will be published in the Colorado Scientific Society newsletter and posted on our Society web page, www.coloscisoc.org.

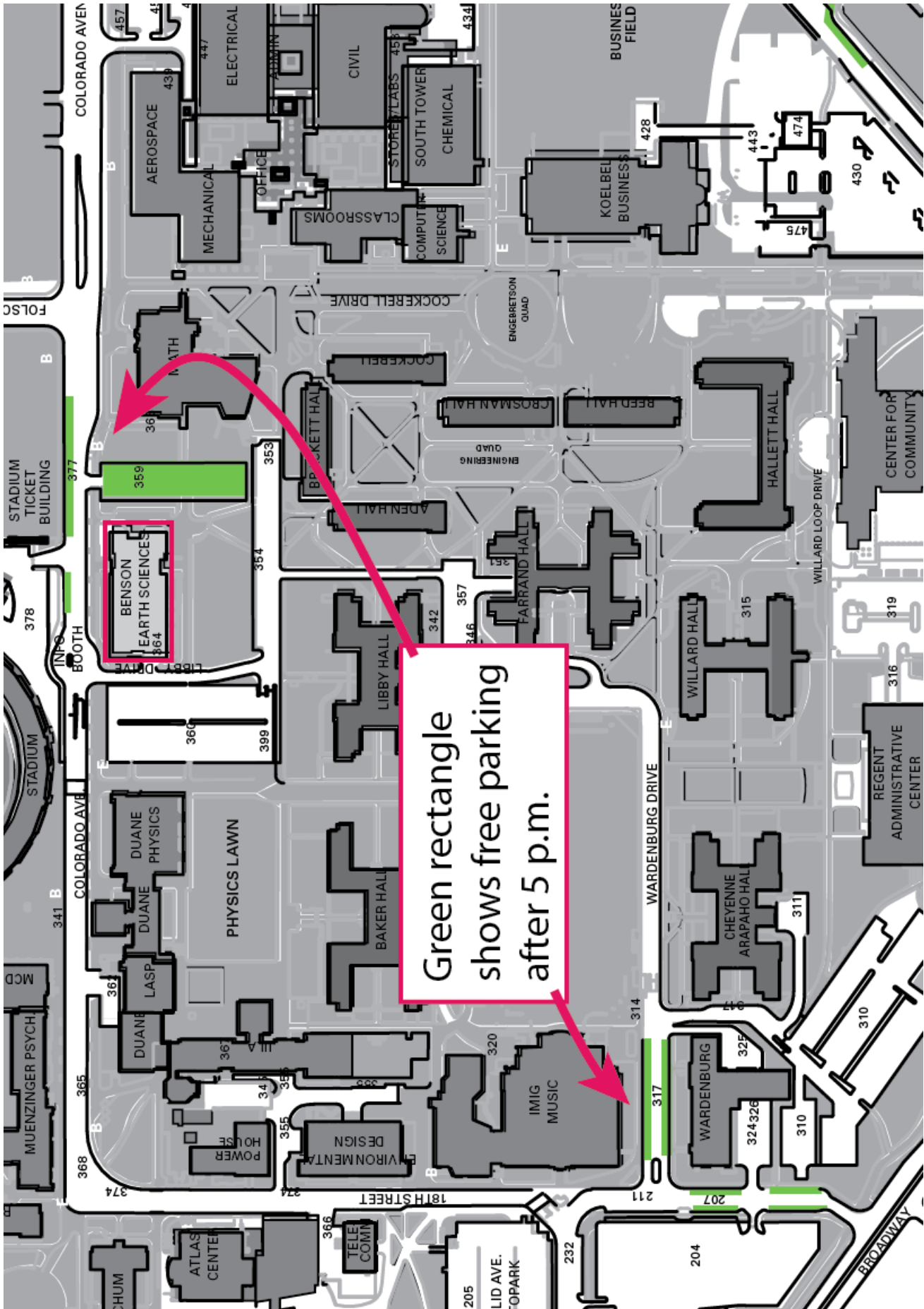
Submit your abstract (~300 words, GSA, AAPG, or similar format) as a Microsoft Word attachment to an e-mail to: Pete Modreski, at pmodreski@usgs.gov.

Abstract submittal deadline: Friday, October 12th

Please provide your contact information, the name of your research advisor, and whether you are a Ph.D., Master's, or Bachelor's degree candidate. You will be informed if your presentation has been accepted by Monday, October 15.

Professors -- Please post this notice outside your classroom or office!

CU BOULDER CAMPUS MAP



President's Message, by Pete Modreski



Our Society has been off to a bit of a slow start in resuming its activities this fall, after our usual summer break; my apologies, as President, for mostly being responsible for this. We did not have a September meeting, but we'll get back into our groove with our annual Student Night presentations, Thursday, October 18. For the first time, we will hold this meeting in Boulder, on the CU campus in Benson Earth Sciences Building, Room 380—courtesy of the CU Geology Department and our Councilor Becky Flowers, who arranged for our meeting there. The titles of our Student Night papers are not yet available as the newsletter goes to press, but we will do our best to post them on our website the week of the meeting, so please check there. We'll plan to send members a copy of the titles and

abstracts by email, too.

Our planned date for the November meeting is Thursday, Nov. 15; and, for December, we need to decide whether Dec. 20 is too close to Christmas to have a meeting; Dec. 13 is an alternate possibility. In addition, please stay tuned until our next newsletter, to find out about plans for the annual "Past Presidents" dinner, and, for an Emmons Lecture—either at the end of this year, or beginning of the next.

Looking for 2013 Sci Soc officers: We are looking for candidates for President, President-elect, and a replacement for Lisa Rukstales, who has done such a wonderful job as our newsletter editor since, it looks like, 2008! If, by the time you read this, you haven't been contacted personally with an inquiry about your filling one of these offices—please consider volunteering, or, volunteering some friend and colleague you may know who might have more time for one of these tasks than you do! You may feel free to contact either Pete Modreski or Scott Minor with any offers or suggestions—thank you!

Summer 2012 "Family Friendly" CSS Field Trip

On Saturday, July 21, about 15 CSS members and friends (including a couple of children) met to collect pegmatite minerals near Harris Park, Colo. Our destination was pegmatite mining claims belonging to the Littleton Gem and Mineral Club, and our visit was courtesy of that club. CSS President Pete Modreski (also a member of the Littleton mineral club) led the trip. The site is at about 9000' elevation in Pike National Forest, north of US-285, and lies at the foot of the "Pegmatite Points" ridge east of Rosalie Peak. It lies within an offshoot of the Pikes Peak batholith, formerly known as the Rosalie Lobe (until it was discerned that the granite on Mt. Rosalie is really part of an older pluton) and now called the Lone Rock pluton, believed to be a cupola connected to the main Pikes Peak batholith at depth. Small pegmatite dikes cut through the granite on the wooded hillsides, and are host to crystals of smoky quartz and microcline; some of the feldspar is the blue-green variety, amazonite, for which Colorado is famed for among mineral collectors. Associated minerals can include albite, fluorite, topaz, goethite, hematite, and others.

A few people in the group found good specimens of quartz crystals, some of which were smoky and some not, plus microcline crystals and small amounts of fluorite. The elusive amazonite wasn't much in evidence, beyond a few cleavage scraps left behind from previous "digs," nor was any topaz found. But it was a beautiful day and all had a good time, and the small creek to ford just before reaching the claim site proved passable for everyone's vehicles!



John Rold, State Geologist of Colorado,
Prepared by Celia Greenman, Vince Matthews, and Lee Gerhard

1920–2012



Born a rancher's son, John grew up surrounded by wildlife in the rural setting of suburban Salida (Maysville). He was a young boy when he lost his father and was raised in the midst of the Great Depression, and thus shouldered many responsibilities at a young age. John worked temporarily for the Forest Service and gained admission to the University of Colorado and its World War II V-12 program, destined to become a naval officer. When that program terminated at the end of the war, he continued his education. At school he played handball and varsity football but also accidentally registered for a course in geology—and enjoyed it enough to carry on, eventually receiving both a bachelor's and a master's degree from CU. For this accomplished hunter and angler, one of the factors in curriculum choice must surely have been the thought of earning a paycheck while working outdoors. John began his professional life with Chevron Oil, when petroleum geology was not largely the office occupation it is today.

In 1969, John was asked to reinstate the Colorado Geological Survey after a 40-year hiatus. One of the first trials the agency experienced was the collision between geological science and less than diligent development interests in Marble, Colorado, where a major ski area was planned. John and his right-hand man for a quarter of a century, Pat Rogers, had mapped large landslides in the Mancos Shale where the proposed lodge and lift towers were located. They had also mapped debris flow paths where condo footprints were staked. This geological assessment became an extremely hot topic, with continual press coverage and accusations and threats leveled at CGS. It could have been the death knell for the newly-established agency. EXCEPT, that during the debates, a debris flow blasted down one of the mapped paths, burying the planned ski village under a 4-foot-thick layer of mud and boulders. On Mt. Daly you can still see the abandoned towers and lodge that remain as testimony that Colorado's natural hazards should not be ignored. Indeed, a recent debris flow came roaring through Marble as another reminder.

Among the many people who speak fondly of John, the phrase “rough around the edges” can be heard more than once. What he lacked in finishing school manners he more than made up for in his forthright determination that people be educated when dealing with or voting on matters that concerned geology. This was just as true for issues concerning extraction of natural resources as it was for geologic hazards. And as for land-use planning, he was not shy in telling how an angry developer would pound on his desk saying that he would have John's job, whereupon John would then hand over the phone and the governor's phone number. The wilder Colorado John knew may have been tamed a bit in the last few decades, but the current Director, Vince Matthews, credits the respect for CGS (and the lack of threats) to the high degree of credibility for the programs established during John's 23 years of working through Colorado's geology and working with the geological and geotechnical consulting community.

Among his many accomplishments John developed from scratch a fully functional CGS geologic staff and programs. This included a geologic publications program for making available applied geo-information for both lay people and professionals. In the mid 80's John offered a home to the Colorado Avalanche Information Center, which remains with CGS today and is the premier avalanche center in the world. John's background in the energy industry gave him the insights in the 1970's to begin evaluating the potential for developing geothermal energy and coalbed methane in Colorado. CGS published numerous analyses and data-bearing reports on both of these topics. Today, geothermal pilot projects are active in different parts of Colorado with participation by CGS. The publications on coalbed methane in the 70's and 80's led the way for industry to get up to speed on the potential of coalbed methane after word of Amoco's success began leaking out. Today, Colorado has the nation's largest reserves of coalbed methane and they provide billions of dollars annually to Colorado's economy and millions to its tax base.

John could have retired after his distinguished service with the State. However, in 1992 he joined Wright Water Engineers as an adjunct scientist, a position he held for nearly 20 years. John participated in landmark work with WWE for a wide variety of clients ranging from major work for ExxonMobil and BP, and rockfall analyses throughout the State in places such as at Gateway, Pitkin County, and Morrison. He also assisted on water resources and geological studies where his vast knowledge and communication skills set new standards. Ken Wright and John were hired by the Gunnison County Commissioners to provide a detailed risk analysis using GIS maps to be used by the Commissioners when making decisions on land use. Both were both pleased several years later when the Public Works Manager for Gunnison County referred to their work as “biblical.” In 1995, John began providing geological expertise on a paleohydrology study at Mesa Verde National Park with a WWE field research team that investigated various sites. The project finished in 2008 with the cliff dwelling known as Mug House, and the final report was authored by John, Justice Gregory Hobbs, David Breternitz and former legislator Ruth Wright.

John was recognized by his peers with the highest award of the American Institute of Professional Geologists (of which he had been president), the Ben Parker Medal. This was a fitting recognition to a career of public service both in government and in private practice, a triumph for honesty, competence and high ethics. John also held local and national leadership positions in numerous other professional societies: the American Association of Petroleum Geologists, the Rocky Mountain Association of Geologists, the Colorado Scientific Society (president 1976), the American Association of State Geologists, and the Geological Society of America. For GSA, John served on a “blue-ribbon” committee that focused on serious financial and publications problems. The committee's recommendations resulted in major restructuring that was adopted and still in use. John also remained active in CU alumni activities throughout his life. (continued on next page...)

John cemented his love of the outdoors by becoming a board member of the Colorado Wildlife Federation. He had learned early that just buying a hunting or fishing license did not adequately protect hunting and fishing heritage. John was pro mining and energy development, as you would expect from a State Geologist, yet he understood that there was a conscientious way to proceed in such efforts that did not generally coincide with the expedient way. That perspective was beneficial to CWF.

John Rold hunted, fished, was a leader in the “International Order of Rocky Mountain Goats,” and initiated all who would listen into the wonders of the outdoor world. John and Phyllis, his wife of 56 years, had four children who accompanied him on camping trips and outdoor adventures. They learned geology up front and personal and also from inside an automobile as the car was headed in a different direction from where John was pointing with his pipe. His love of fishing was passed down to his children and grandchildren, who occasionally perfected their casting by aiming at egg carton divisions in the backyard that contained different combinations of change, or maybe a dollar bill. When John cast a fly, his line danced out over impossible distances, landing lightly on the water. He usually had a fish on before anyone else. Unlike some, he would share what fly he was using, and where he thought the fish might lie. He would compliment his fellow anglers, even if they were struggling with wind knots and tangled leaders.

The visual image of John is with Stetson, jeans, boots, and his light gray jacket set off with brightly colored patches signifying his membership in outdoor organizations. All who knew him acknowledge his dedication to the geological profession and the state of Colorado, and will miss his honesty, directness, generosity and larger than life personality.



New USGS publication:

Data Series 693

Locations and Attributes of Utility-Scale Solar Power Facilities in Colorado and New Mexico, 2011

By Drew A. Ignizio and Natasha B. Carr



CSM GEOLOGY MUSEUM GARAGE (& BOOK) SALE Sat., Nov. 3, 2012, 9 a.m. to 4 p.m. Colorado School of Mines Geology Museum, 13th and Maple St., Golden, CO. All are invited! For more info, contact 303-273-3815.

INVENTORY BLOWOUT SALE SALES BEGIN NOVEMBER 1

70% off over 150 publications

Colorado Geological Survey

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303-866-2611 or online: geosurveystore.state.co.us

Public Forum—Changes to the Colorado Geological Survey To: Interested Individuals and Organizations



Thank you, to those of you who provided written feedback in response to our August 30 communication about upcoming changes to the Colorado Geological Survey (CGS) and the pending transfer of the Survey to the Colorado School of Mines (CSM). Your feedback was very informative and is being carefully considered as we make final decisions about funding and the Memorandum of Understanding with the CSM.

On October 15, 2012, DNR Executive Director Mike King will host a public forum to provide an opportunity for you to provide any additional comments you may have concerning the changes. The forum will be hosted from 6:00 p.m. to 8:00 p.m. at 1313 Sherman Street in Room 318. **Room capacity is limited, so please RSVP no later than Thursday, October 11**, if you plan to attend. Entry to the building is limited to the the doors on the east side, facing Sherman Street. Fee parking is available in a lot just south of the building (between 12 and 13th on Sherman) and some free street parking is available south on Sherman.

To RSVP, please email me directly at kim.burgess@state.co.us. Should the meeting need to be rescheduled, updates will be provided via email no later than noon on the 15th. If you have any questions, please let me know.

Kim Burgess

Chief Operating Officer

Colorado Department of Natural Resources 303-866-3311, ext. 8660



Earth Science Meetings and Talks

Newsletter items must be received by the 25th of each month.

Colorado Scientific Society's regular meetings are held the 3rd Thursday of the month at the Shepherd of the Hills Presbyterian Church, 11500 West 20th Ave., Lakewood, CO (unless otherwise advertised).

Social time begins at 6:30 p.m. and talks start at 7:00 p.m.

For more information, contact Pete Modreski, at 303-202-4766, pmodreski@aol.com



CO-AIPG Oct. 16 *Matthew Rhoades, Rhoades Consulting Services, Englewood, CO*, "Geotechnical Considerations in Constructing a High-rise Building in Bogota, Colombia." 11:30 a.m. lunch & talk at 12:30 p.m. Golden Corral Buffet & Grill, 3677 South Santa Fe Drive, Sheridan, CO 80110 (Southwest side at Santa Fe Dr. & Hampden Ave.) Price: Buffet lunch (approx. \$10) must be purchased for entry to the Golden Corral. A additional voluntary tip of \$1/person is requested for the wait staff in the meeting room. Free parking.

Reservations or more info: Contact Tom Cavanaugh, tom.cavanaugh@amec.com or 303-293-6002, by Noon on October 12.

Denver Mining Club Oct. 15 *Richard Parsons, Mineral Collector*, "Introduction to Micromounts." **Oct. 22** *M. Jane Smith, Owner, Chase Mine, and Albert J. "Abe" Barnhard, President, Barnhard Mining Co.*, "The Chase Mine, Gilpin Co., Colorado: History and Development Future." **Oct. 29** *Ed Raines, Collections Manager, CSM Geology Museum*, "Copper-bearing minerals of Colorado." The DMC meets on Mondays at the Golden Corral Buffet & Grill, 3677 South Santa Fe Dr., Sheridan, CO 80110 (Southwest side at Santa Fe Dr. & Hampden Ave.) 11:30–1:00. Purchase of lunch required. Visitors always welcome! Dick Beach, Secretary, 303-986-6535

DIPS (Denver Intl. Petroleum Society) Friday, Oct. 12 Susan Morrice, Belize Natural Energy, "You'd better Belize it!" Wynkoop Brewing Company, 1634 18th Street, Denver. Gather at 11:30 am; Lunch served at Noon; Lunch price: \$20.00 for members and \$24 for non-members. \$5 for talk only. Please e-mail Roger Gilbertson at gilbertsonrig@earthlink.net or call him at 303-345-4371 to make reservations before Wednesday, Noon, Oct. 8.

Rocky Mountain Association of Geologists (RMAG) Nov. 7 *Phillip H. Nelson, USGS*, "Underpressured Gas Accumulations with Pressure Control at the Outcrop." Register by Nov. 5th at: https://www.rmag.org/i4a/ams/amsstore/category.cfm?category_id=3. Member price \$30, Non-member price \$40. Talk only \$5. Location: Denver Marriott City Ctr., 17th & California. <http://www.rmag.org/i4a/pages/index.cfm?pageID=3289>

Van Tuyl Lecture, Colorado School of Mines Berthoud Hall Room 241, Thursdays 4–5 p.m. Oct. 11 *Dr. David Pyle*, "Quantifying the hierarchical organization of compensation in submarine fans using surface statistics." **Oct. 18** *Alfred Lacazette, Global Geophysical Services, Inc.*, "TBA" **Oct. 25** *Joel Duncan, Teaching Professor, EPICS and Geology and Geological Engineering, Colorado School of Mines*, "The Colorado Cataclysm: An impact crater cluster in the Front Range."

For those who love rock books:

Cairns: Messengers in Stone Readings in Boulder and Denver

Greetings from Seattle. I wanted to let you know about two events that I thought would interest members of the Colorado Scientific Society. The talks are for my new book, *Cairns: Messengers in Stone*, which weaves together the cultural and and natural history of cairns from around the world. Part history, part folklore, part natural history, my book shows that cairns are more than a random pile of rocks, they provide habitat for plants and animals, a means of communication, and guides for travelers worldwide. For more information, you can go to the cairns page on my website. Hikers, climbers, travelers, gardeners, and nature buffs alike will delight in this quirky, captivating collection of stories about cairns.

I am a geologist, natural history writer, and former ranger at Arches National Park. My other books include *Stories in Stone: Travels through Urban Geology* and *A Naturalist's Guide to Canyon Country*.

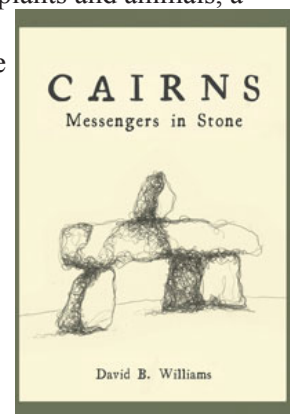
October 18, Boulder Books - 7:30 p.m.

October 20, Tattered Cover Books - LoDo Store - 2:00 p.m.

Sincerely,

David B. Williams

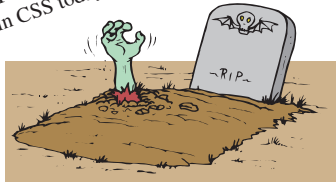
Web site: www.geologywriter.com



Colorado Scientific Society
P.O. Box 150495
Lakewood, CO 80215-0495

<http://www.coloscisoc.org>

We DIG new members!
Join CSS today!!!!



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