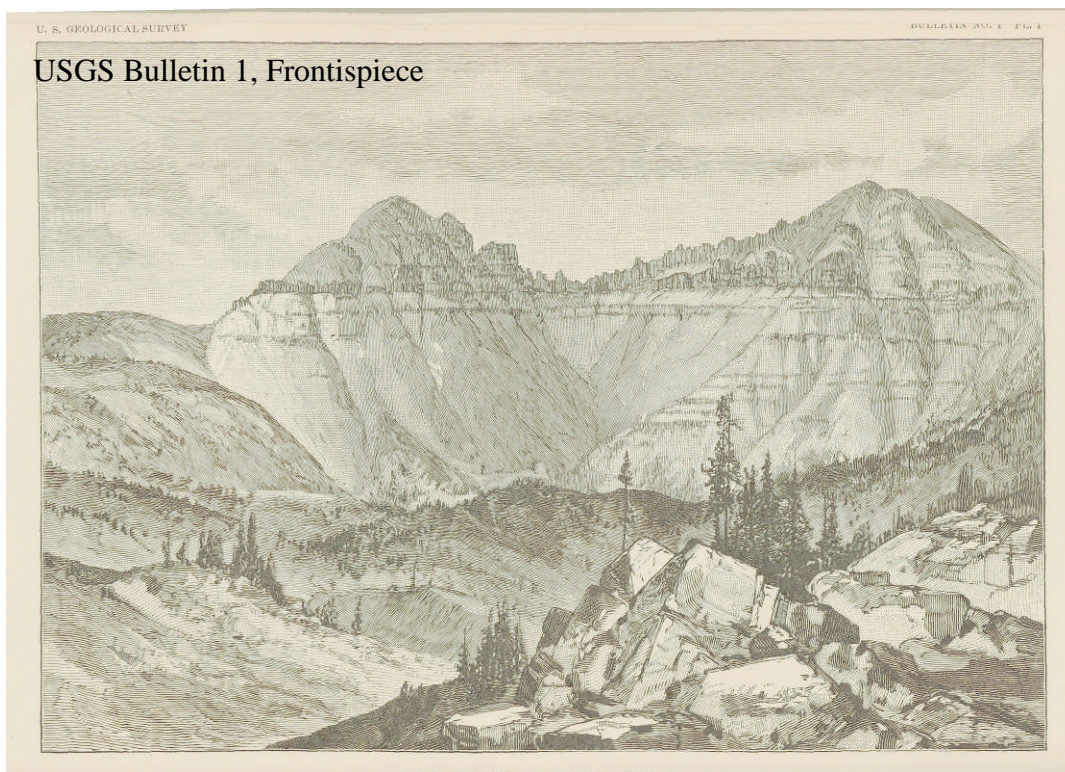




Colorado Scientific Society

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



USGS Bulletin 1, Frontispiece

The Volcanoes of Colorado

A Symposium Honoring Thomas A. Steven

Saturday, May 19, 2007

University of Northern Colorado, Greeley (UNC)

Ross Hall, 9 a.m. to 5 p.m.

(registration form inside)

The Volcanoes of Colorado Symposium - Program

Morning Talks (talks will last about 40 min.)

Welcome and Introduction—9:00 a.m.

Peter Lipman: *Ignimbrite-caldera processes in Cenozoic Cordilleran-arc systems: Southern Rocky Mountain volcanic field and central Andes.*

John Ghist: *Satellite Image tour of Colorado Volcanoes.*

Break

Paul Morgan: *Cenozoic volcanism, heat flow, and uplift in the Southern Rocky Mountains.*

Peter Modreski: *Zeolites, chalcedony, and friends; postmagmatic minerals in mafic to silicic volcanics of Colorado- who, where, why, and when.*

Lunch Break

Afternoon Talks

William McIntosh: *Central Colorado Volcanic Field*

Bob Kirkham: *Deciphering the tectonic evolution of west-central, south-central and central Colorado using upper and middle Cenozoic volcanic rocks.*

Break

Michale J. Kunk: *40Ar/39Ar dating results of volcanic rocks in west-central Colorado and their application to geologic problems.*

Emmett Evanoff & Ed Larson: *Tuffs of the White River Sequence of Colorado and adjacent states.*

Colorado Scientific Society President's Note—May 2007

By Bill Nesse

The Colorado Scientific Society functions because members volunteer their time and energy to make things happen. This month I would like to highlight the contributions made by John Ghist, who is the Webmaster for the society's web page (www.coloscisoc.org). As we become increasingly dependent on the ready availability of information on the internet, it is important that the Society use the web to accomplish its mission. To that end John has recently given the web page a complete overhaul to make Society information more readily available to the members and to the broader public. A number of new features have been added to the web page and others have been enhanced.

A major new item the ability of members to pay dues and make contributions on-line using the PayPal system. The PayPal system has been used extensively to allow convenient payments on E-bay, but it has expanded considerably and is now widely used by many merchants. I routinely use it to make and receive payments in my luthier work. Setting up an account is simple and it is very secure (probably significantly more secure than using

paper checks).

The second new feature is the addition of copies of historical articles by CSS members in PDF format. Click on the link and you will find articles by Emmons, Cannon, and Lakes. Others will be posted in the future. If you have suggestions for an article that should be posted, or you would like to help, let John know.

Another item worth highlighting is the "Virtual Field Trip" to the area around NCAR in Boulder. This is a great addition to the growing list of field trips posted on our web. More can be found in the Field Trips section. Getting CSS field trip guides posted on the web has been a project dear to the heart of Sue Hirshfeld. Any help that members can provide will be appreciated.

For all the work that has gone into making creating and updating (a time consuming task) the Society's web presence, I want to extend the thanks of the Society to John.



Buffalo Peaks – From the North

The Volcanoes of Colorado

A Colorado Scientific
Society Symposium
Honoring Thomas A.
Steven

When: May 19, 2007; 9:00 a.m. - 5:00 p.m.
Where: University of Northern Colorado, Greeley
Ross Hall 1020
Cost: \$5
More Info: <http://www.coloscisoc.org>

To Register: Please register in advance so that we know the number of people to expect.

E-mail Bill Nesse (nesse@ctos.com) to let us know you are coming and pay at the door.

Or

Complete the information below and mail it to:

Dr. William Nesse
Department of Earth Sciences
Campus Box 100
University of Northern Colorado
Greeley, CO 80639

Name: _____

Affiliation: _____

Address: _____

E-mail _____ Telephone _____

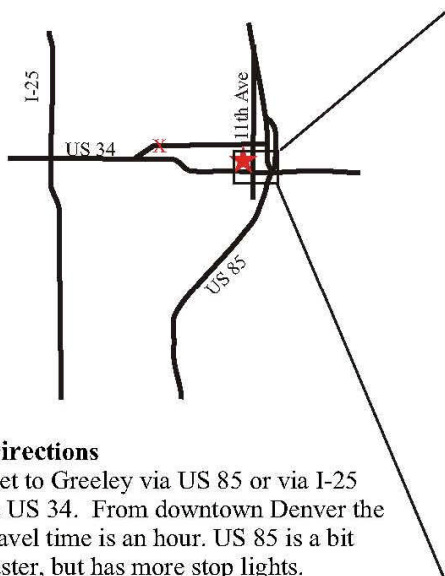
☐

Payment is enclosed
(payable to Colorado
Scientific Society)

☐

I'll pay when I arrive

Directions to Ross Hall on the UNC Campus



Directions

Get to Greeley via US 85 or via I-25 & US 34. From downtown Denver the travel time is an hour. US 85 is a bit faster, but has more stop lights.

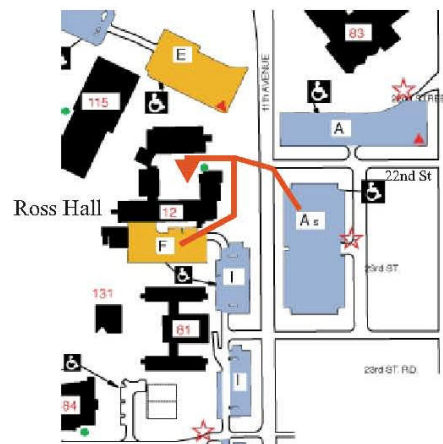


Via US 85

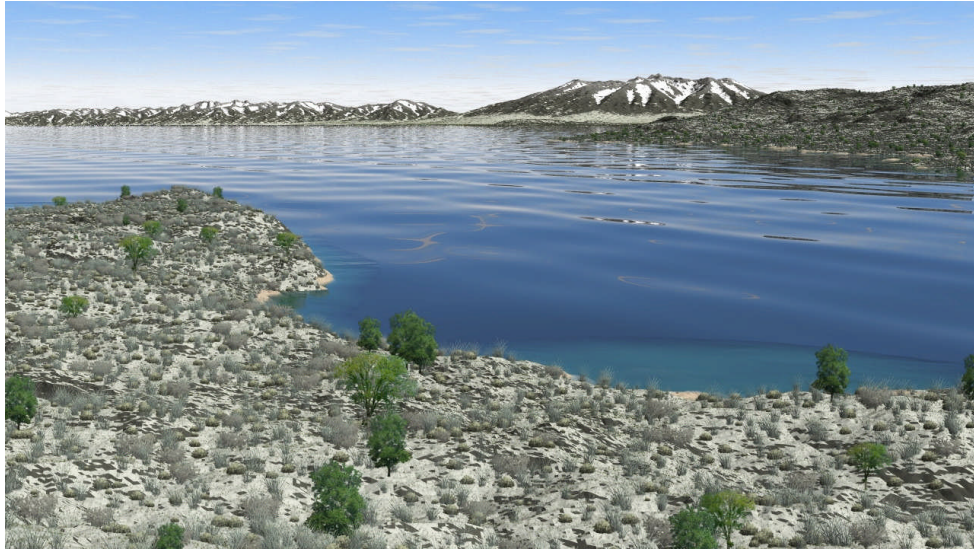
North on US 85, do not take the bypass to Cheyenne
 US 85 becomes 8th Ave.
 Turn West at 22nd Street (ditto if you happened to take the bypass)
 Turn South on 10th Ave Court (or go to lots F & I via 11th Ave and 23rd St.)
 Turn West into Parking Lot A-South
 Walk west across 11th Avenue to Ross Hall.

Via US 34

East on US 34 (don't take the bypass about 5 miles west of town)
 Turn North on 11th Avenue
 Turn West on 23rd Street (or go to 22nd Street and hang two rights into Lot A-South)
 North on the frontage road
 Park in lot F on the south side of Ross Hall or in Lot I by the dorms.
 Walk around the east end of the south wing and enter the courtyard.



Upcoming Field Trips 2007



GIS recreation of Lake Alamosa at about 500 ka. View is to the NNE from San Luis Hills.

June 2-3- The CSS spring field trip will be led by Mike Machette to ancient Lake Alamosa, the Plio-Pleistocene lake that occupied a large part of the San Luis Valley. This fascinating trip will examine various lake features, such as spits, bars and lagoon deposits, discuss the timing and ultimate overflow of the lake, peat and tufa deposits, and visit the Quaternary Mesita Volcano. We will also visit the Sangre de Cristo fault zone and its scarps near Fort Garland, some of which are as young as early Holocene. There will be a brief stop near Kenosha Pass to arm wave at the eastern margin of South Park where new mapping by Bohannon and Ruleman, USGS, has shown possible late Quaternary faults.

The trip will include transportation from Lakewood, one night lodging in Alamosa at the Lamplighter motel, two lunches and one continental breakfast, and the field guide. Camping at the KOA is an option. Student grants are available from the Pillmore fund to cover some or all expenses. **Contact** Karl Kellogg (kkellogg@usgs.gov; (303) 236-1305) for additional information.

Meeting place for van pool: Cold Spring Park & Ride, 4th and Union, Lakewood. **7 a.m.** Saturday Return 5:30 p.m. Sunday to Park & Ride. Cost : \$95-\$125, motel. \$70 KOA (no breakfast). See registration form below. Deadline is **May 18**.

Register for the Lake Alamosa field trip—June 2-3

Name: _____

Phone: _____ E-Mail: _____

Number of Participants: _____ @ \$95/ person (double occupancy) = _____

Number of Participants: _____ @ \$125/person (single room) = _____

Number of Participants: _____ @ \$70/campsite KOA = _____

Total for all attending: \$ _____

Food preferences: _____

For registration, send this form and your check made out to **Colorado Scientific Society** to Karl Kellogg, Colorado Scientific Society, P.O. Box 150495, Lakewood, CO 80215-0495.

Deadline is May 18 (sooner is appreciated.)

Mark Your Calendars:

Field trip double header this fall.

September 29. Geology and mining history of the Idaho Springs-Central City mining district.

This trip is intended largely as an overview of the geology and mining history of the district appropriate for people of all geologic backgrounds. We'll look at vein minerals, both above ground and underground, examine mineral zonation, discuss recent dating of faults in the district, view the Idaho Springs-Ralston shear zone and discuss its role in mineralization, and visit the mining museum in Idaho Springs. We'll also explore the historic, recently restored Hidee Mine and actually mine a little gold-bearing ore. Karl Kellogg, Bruce Bryant, Jonathan Caine, and Beth Simmons (and undoubtedly others) will co-lead the trip. Beth, who works extensively with Friends of Dinosaur Ridge, will be filling us in on the history of the district.

October 6. Visit to Florissant Fossil Beds

National Monument. Herb Meyer, resident paleontologist at FFBNM, and past CSS President Emmett Evanoff, who has worked extensively in the fossil beds, will lead this trip. They will also be giving a presentation on Florissant at the September meeting. The following quote from the Monument website eloquently describes the essence of Florissant: "Beneath a grassy mountain valley in central Colorado lies one of the richest and most diverse fossil deposits in the world. Petrified redwood stumps up to 14 feet wide and thousands of detailed fossils of insects and plants reveal the story of a very different, prehistoric Colorado." Don't miss it!

Science Fair News

On Thursday, April 4, members Tom Sutton and Chuck Weisenberg judged the Colorado State Science Fair at the Lory Center of Colorado State University. The following **CSS special awards** were determined.

Senior Division (9th-12th)

first place, \$100 **Bailey Jones 12th grade, Canon City High School, Canon City**
"Which Rock, What Time, Which Fossil Can You Find". Bailey made a fine collection of Cretaceous fossils from local formations and had them identified at a local museum.

Second place, \$75 **Austin Nichols, 11th grade, Brush H.S. Brush**
"The Controlled Growth of Penitente Structures". Penitente structures are small pinnacles that form on

melting snow. Austin used a sun lamp to heat snow and make features similar to those found in nature.

Junior Division, (6th-8th)

First place \$75 **Nia Quadracci, 6th grade, Bromley East Charter School, Brighton**
"Icy Albedo" Nia studied the rate at which ice melted when different materials like dust coated the surface. The results could relate surface disturbance (through development and erosion) to melting ice.

Second place \$50, **Hannah Carrese, 8th grade, North Middle School, Colorado Springs**
"Hg- The Lethal Element: Emissions From A Coal-Fired Power Plant" Hannah analyzed soil samples collected near a local plant and developed models to explain the pattern found.



Earth Science Meetings and Talks

Newsletter items must be received by the 25th of each month. Items may include special events, open houses, etc...thanks!

Colorado Scientific Society's regular meetings are held the 3rd Thursday of the month at the American Mountaineering Center in Golden (unless otherwise advertised). Social time begins at 6:30 p.m. and talks start at 7:00 p.m. For more information, contact Bill Nesse at 970-330-7183 nesse@ctos.com



Denver Mining Club meets every Monday (except when noted) at Country Buffet near Bowles and Wadsworth (at 8100 W. Crestline Ave.) 11:30-1:00. May 14, Paul Nagy, "Gold prospectors of the Rockies, a club for recreational prospecting." <http://china-resources.net>.

Denver Region Exploration Geologists' Society (DREGS) meets in the Mutual Consolidated Water Building, 12700 West 27th Avenue, Lakewood. Social ½ hour 6:30-7:00 p.m. Technical presentation at 7:00 p.m. Meetings are normally scheduled for the first Monday of each month. May 7, M.H. Karimpour, "Exploration opportunities for gold and copper in eastern Iran, a new mineral deposits database." For information contact Jim Piper, (303) 932-0137, or the website <http://www.dregs.org>.

Denver Well Logging Society (DWLS) meets on the third Tuesday of each month, Sept. through May. Lunch and a technical talk at the Wynkoop Brewery begins at 11:30 a.m., 18th and Wynkoop Sts. in Denver, \$15. Subject matter usually deals with the application of well logs to oil and gas exploration. Call Eleice Wickham at 303-573-2781 for reservations. Web page: <http://dwls.spwla.org>.

Rocky Mountain Association of Geologists (RMAG) Reception at 11:30, lunch at noon, talk at 12:30. Reservations by recording at 303-623-5396 until 10:30 a.m., Wed. before the luncheon. Cancellations until 11:00 a.m. on Wed. at 303-573-8621. Luncheon is \$20 payable to RMAG at the door. Talk only (no res)—cost is \$3. Location: Denver Marriott, 17th & California. May 4, Ray Thomasson, "Global climate change, another perspective." Jun 1, Steve Sonnenberg, "A history of the Union Pacific strip." Web page: <http://www.rmags.org>.

Rocky Mountain SEPM Reception at 11:30, lunch at noon, speaker at 12:30. Reservations, Dave Uhl: 303-389-5092 before noon of preceding Friday. \$15.00 lunch, \$3 talk only. Wynkoop Brewing Company, 1634 18th St., Denver. David.uhl@EnCana.com.

University of Colorado at Boulder, Geological Sciences Colloquium Wednesdays, 4:00-5:30, Rm. Benson Earth Sciences Conference Rm 380. Refreshments at 3:30 on the 3rd floor. 303-492-8141. Web page: <http://www.colorado.edu/GeolSci>.

Colorado State University, Dept of Geosciences, Rm 320 Natural Resources Bldg, Mondays, 4:10 pm. 970-491-5661. <http://www.cnr.colostate.edu/geo/seminars>

Friends of Dinosaur Ridge. Morrison Town Hall 110 Stone Street, 7:00 p.m., Jun 22, 23, Adrian Hunt, "Dinosaurs of Dinosaur Ridge." (rescheduled). May 20, Hike with Pete Modreski up Green Mountain. Jun 2, Hike with T Caner on Triceratops trail. Jun 10, Hike with Harald Drawes up South Table Mountain. Admission is free, but donations are welcome. FODR Visitor Center at (303) 697-3466, Web page: <http://www.dinoridge.org>.

Colorado School of Mines, Van Tuyl Lectures Thursdays from 4-5 p.m. in Berthoud Hall room 108. <http://www.mines.edu/academic/geology.html>

USGS Geologic Division Colloquium. Thursdays, 1:30, Foord Room, Building 20, Denver Federal Center. May 3, Andrew Todd, "Mining legacies in the Snake River Watershed: biochemistry, stream ecology, and human use." For more information contact: Pete Modreski, U.S.G.S., Denver, Colorado tel. 303-202-4766, email pmodreski@usgs.gov.

Café Scientifique. Wynkoop Brewery, 18th & Wynkoop, 6:30 p.m. May 15, Vince Matthews, State Geologist, "China and India's ravenous appetite for natural resources, the potential impact on Colorado." No charge, except for beer. <http://cafescolorado.org/Upcoming>

For a constantly updated, online geo-calendar, visit the Colorado Geological Survey at
<http://geosurvey.state.co.us>

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

<http://www.coloscisoc.org>



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Secretary: Lisa Fisher, CSM, 303-478-9427 (c), lfisher@mines.edu,
Past President: Chuck Kluth, CSM, 303- 904-2939, kluths@comcast.net

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2007-2010: Tim McIntyre
2006-2009: Scott Minor, USGS, 303-236-0303, sminor@usgs.gov
2004-2007: Sue Hirschfeld, Cons., 720-565-9302, eqdoc@ix.netcom.com
2004-2007: Lee Shropshire, UNC, 970-352-8778, leeshrop@att.net

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