

Colorado Scientific Society

In pursuit of the promotion of knowledge, understanding of science, and its application to human needs.

THE GEOLOGY OF DENVER'S BUILDING STONES

Jack Murphy

Denver Museum of Natural History

THE PALEOHYDROLOGY OF MACHU PICCHU

Ken Wright Wright Water Engineers, Inc.

Tuesday, May 12, 1998 Union Square Theatre in the Sheraton Hotel 360 Union Boulevard Lakewood, Colorado

Social Hour: 7:00 p.m. Meeting Time: 7:30 p.m.

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Speakers' Abstracts

THE GEOLOGY OF DENVER'S BUILDING STONES

Jack Murphy **Denver Museum of Natural History**

Building stones in Denver's Landmark buildings reflect Colorado's geologic history and can be used as an educational resource. A survey of historic landmark structures shows that native granite, sandstone, rhyolite, marble, and travertine were mainly quarried for dimension stone until the Silver Crash of 1893. Pikes Peak Granite was widely used as foundation stones. South Beaver Creek Granite from south of Gunnison makes up the exterior walls of the State Capitol. Many mansions and churches dating from the late 1800's is made up of blocks of Lyons Sandstone from the Red Rock Canyon quarries south of Garden of the Gods, El Paso County. Marble from Yule, Colorado is probably the States best known stone because of its use nationally.

THE PALEOHYDROLOGY OF MACHU PICCHU

Ken Wright Wright Water Engineers, Inc.

We regret that Ken's abstract was not received in time for inclusion in the newsletter. Please visit the Colorado Scientific Society's homepage for the final version of the Newsletter.

New Members

The Colorado Scientific Society welcomes the following new members:

Andrew B. Dunn Paul C. Murphey J. Carlos Rodriguez Welcome!
Welcome!

Museums and News

Friends of Dinosaur Ridge...for information call 697-DINO. Visitors' Center is located at 16831 West Alameda Parkway (north side of Alameda, just west of the C-470 overpass). Open 9 a.m. to 4 p.m. weekdays and weekends. Fireside chats are held at the Morrison Town Hall, 110 Stone Street in Morrison starting at 7 p.m.

Morrison Natural History Museum...is open 1-4 p.m., Wednesday through Sunday. The Museum is located on State Highway 8, ½ mile south of Morrison. Fireside chats are cosponsored periodically by Friends of Dinosaur Ridge (see above).

Colorado Mineral Society will have its annual silent auction of mineral hobby items on May 2nd at the Maplegrove Grange Hall located at 3130 Youngfield St. in Wheat Ridge from 1 to 4 p.m. The auction features reasonably priced minerals, fossils, faceted stones, lapidary equipment, books, and jewelry. Admission is free.



Colorado Chapter of the Friends of Mineralogy will hold its annual silent auction of mineral hobby items on May 17th at the Glendale Community Center, 999 S. Clermont (near Mississippi and Colorado Blvd.) from 7 to 10 p.m. Admission is free.

Earth Science Meetings and Talks

- **Colorado Scientific Society's** regular meetings are held the 2nd Tuesday of the month (unless otherwise advertised). Social time begins at 7:00 p.m. and program is at 7:30 p.m. For information, contact Eric Erslev at (970) 491-6375 or erslev@cnr.colorado.edu.
- **Denver International Petroleum Society (DIPS)** meets the 2nd Friday of each month at the Wynkoop Brewing Co., 18th and Wynkoop Streets. Reception begins at 11:30 a.m., luncheon at 12 p.m., program at 12:30 p.m. Make reservations (required) by calling Kristine Peterson (303) 980-6770. Reservations accepted after 8 a.m. on Friday until 10:30 a.m. on Wednesday prior to the meeting. Cancellations accepted until 11:00 am Wednesday prior to the meeting. Cost: \$13 for lunches; talk only is available for \$2 (make checks payable to "DIPS"). Contact Keith Murray at (303) 986-8554 for information.
- **Denver Region Exploration Geologists' Society (DREGS)** meets in the Mutual Consolidated Water Building, 12700 West 27th Avenue, Lakewood. Social hour 6:00-7:00 p.m. Technical presentation at 7:00 p.m. Meetings are normally scheduled for the first Monday of each month. For information contact Jim Cappa, (303) 866-2611. Next meeting will be September 14, 1998.
- **Colorado School of Mines Van Tuyl Lectures,** Berthoud Hall, room 108, 4:30 p.m. For information call the Dept. of Geology at (303) 273-3800.
- Colorado School of Mines Carl Heiland Lectures and other Talks

For information contact Michelle Szobody (303) 273-3451. Refreshments are served immediately following the lecture.

Colorado State University Geology Lectures

All presentations are at 4:00 p.m. in room 316 of the Natural Resources Building. Call the Dept. of Earth Resources at (970) 491-5661 for further details.

- **Denver Mining Club** meets Thursdays from 11:30 a.m. to 1:00 p.m. at the Country Harvest Buffet at Villa Italia, 7200 W. Alameda Avenue, Lakewood. For more information contact Dick Beach at (303) 986-6535.
- **USGS** Geologic Division Colloquium talks are held in the Eugene Foord conference room, Bldg. 20, Denver Federal Center. Contact Pat Poole (303) 236-5438 for exact times and additional information.
 - May 21—Murray Hitzman: "Geology of the Irish Orefield--Avenues for future research"
 - May 28—Jim Cole: "Structural and stratigraphic framework of pre-Tertiary rocks in the Nevada Test Site region"
 - June 4—Kevin Mandernack: "Oxygen isotope studies of bacterially produced manganese and iron oxides"
 - June 11—Jeff Coe: "Evaluation of stream and debris flow hazards of small fans along the Interstate-70 Highway corridor, central Colorado"
 - June 18—Linda Smith-Rouch: "Monsoon season in the Desmoinesian, Paradox Basin"



CSS Avalanche Safety Field Trip

The Society was fortunate to have Dr. Bill Hotchkiss, Scientist Emeritus with the USGS Water Resources Division, lead field seminars on avalanche safety for the Society on February 22nd and March 29th. Bill is a member of the National Ski Patrol and a co-founder of the National Avalanche School. He has given avalanche seminars all over the Rocky Mountains and is regarded as an expert in the field. The seminars were specially suited to the recreational skier or snowshoer who is unfamiliar with snow avalanche safety techniques and equipment.

With this edition of the Newsletter, I say goodbye. I will be retired from the USGS in the fall when CSS meetings resume.

As a famous alien once said, "Live long and prosper."

Dave Nealey

Editor



Bill Hotchkiss instructs CSS members in avalanche safety. Photo courtesy of Jack Reed.

Spring Field Trip

GEOLOGICAL HIGHLIGHTS OF THE COLORADO SPRINGS AREA

The 1998 spring field trip will be a single day excursion to the Colorado Springs area on Saturday, May 16. Highlights will include recent interpretations of the history of the Rampart Range, Cambro-Ordovician stratigraphy, and structural features in the

Guests are welcome. Although no strenuous hiking or climbing are anticipated, participants should wear sturdy footgear suitable for any terrain.

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and good fellowship. Not included is lunch; participants need to bring their own. Enrollment will be limited to 36 people.

Name______Phone Number_____ Address_____ Name(s) of Guest(s) you plan to bring ______

COLORADO SCIENTIFIC SOCIETY 1998 SPRING FIELD TRIP

To register, please **send** by 1 May 1998, this completed form and a check in the amount of \$32 <u>per person</u>, made payable to the Colorado Scientific Society, **to: K. Lee Shropshire, Department of Earth Sciences, University of Northern Colorado, Greeley, CO 80639**.



Invitation to Join the Colorado Scientific Society

The Society is dedicated to the advancement of science through open forums and activities. We sponsor lectures, field trips, student scholarship grants, and discussions of scientific matters of public concern. I hereby apply for membership in the Colorado Scientific Society. (Regular, Corresponding, Student) (Last Name) (First Name) (Middle) (Telephone, with area code) (Address) (e-mail) (City) (State) (Zip) (Company/Agency/University) (Mailing address if different than above) School **Degree** Year Major **Main Scientific Interests** UES—Your dues are for the calendar year and help support the newsletter, monthly meetings, two field trips each year, family night, and the Emmons Lecture. Regular Member (\$15) Corresponding (outside Denver metro area) Member (\$10) Student Member (\$5) Please make your dues payable to Colorado Scientific Society. Thank you!! The success of certain Colorado Scientific activities depend on your volunteer help. Please circle those activities for which you can provide assistance. We will pass your name on to the appropriate Committee Chairperson. Arrangements Fund Raising Newsletter **Publicity** Science Fairs Best Paper Award Outreach History Web Site Field Trips Membership Program I certify that all statements in this application are correct and, I agree to promote the objectives of the Society and to abide by its Constitution, Bylaws, and Rules.

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

Date

Visit CSS at http://rainbow.rmi.net/~css/



Applicant's signature

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

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