



# Colorado Scientific Society

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

## *September Presentation:*

***“RIVERS: TYPES, EXPLORATION, TRADE”***

***BY ROBERT J. WEIMER***

***Colorado School of Mines***

## ***CSS Family Night***

**Friday, September 15<sup>th</sup>, 2000**

**Colorado School of Mines Geology Museum  
16<sup>th</sup> and Maple (West End of Berthoud Hall)  
Golden, Colorado**

**Reception: 6:00 p.m. , Dinner: 6:30 p.m.  
Talk: 7:30 p.m, in Room 108, Berthoud Hall**

<http://home.rmi.net/~css/>



## President's Note

Another summer has almost passed and it is time for Colorado Scientific Society activities to resume. We will begin the fall session in fine fashion with our annual **Family Night**. This Friday evening event (September 15<sup>th</sup>) will feature a sumptuous buffet dinner followed by a presentation by **Dr. Robert Weimer**, CSM professor emeritus and past Society president, that will be of interest to Society members and their families. Dr Weimer will treat us with his talk “**Rivers: Types, Exploration, Trade**” that was popular at Foothills Art Gallery last spring. Dinner will be held in the Geology Museum and the presentation will be in nearby Rm 108, both in Berthoud Hall on the Colorado School of Mines campus. Given a short time window, please send in the reservation form (see below) promptly for this event.

Not long afterwards will be time for the fall field trip (September 30- October 2). Sherman Marsh is organized what should be a fabulous trip to Antonito-Chama narrow gauge train in southern Colorado and northern New Mexico. As typical, Sherman will do this field trip in fine style. Participation will be limited by train reservations (20), so sign up soon.

Our next regular meeting will be October 19 when we will be back to the American Mountaineering Center to hear Kathy Nagy and John McCray. Student Night will be November 8<sup>th</sup>. I hope to see you at one of these events.

**-Mark R. Hudson, CSS President**



# Rivers: Types, Exploration and Trade

## Abstract of Presentation by Robert J. Weimer:

Of all the forces that shape the land, running water is the most powerful. Gentle rain, melting snow, and trickles become rushing torrents, lazy streams and mighty rivers; water, running inexorably downhill, changes the face of the earth.

Geology, topography and climate influence a river's run-off and sediment load. Because of these variables, rivers differ greatly in their physical characteristics and general behavior, and no two are alike. Geologists interpret ancient rivers, and predict their distribution for economic development, by studying the processes and deposits of modern rivers.

Most people have one or more rivers running through their lives. Because rivers have been vital to sustain life and to maintain the centers of old and new cultures, they have been objects of art works for centuries.

Foothills Art Center mounted an exhibit early this year—"Rivers: the Song of Life" – featuring paintings, sculpture, and photographs. Originally given in relation to a display on the "Science of Rivers" by Virginia Mast, Graham Curtis, and me, this talk uses space photography, photographs, sketches and paintings to illustrate river types and the role of rivers in early western U.S. exploration and trade.

Dr. Robert J. Weimer  
Professor Emeritus  
Colorado School of Mines  
Golden, CO  
e-mail: [rweimer@mines.edu](mailto:rweimer@mines.edu)



## October Presentations

CSS talks are already scheduled for October, and will include “Groundwater vulnerability to agricultural contamination in Colorado and the High Plains” by John McCray, Stephanie Schlosser, and Joseph McCarthy, Colorado School of Mines, and “Molecular-Scale Insight to Natural Clean-up of Contaminated Water” by Kathryn Nagy.

## CSS Fall Field Trip- September 30, 2000

Well, fall is almost upon us and hard as it may seem now, the weather will be cooling off! I'm just putting together the fall CSS field trip and we will be heading south to take the narrow gauge train ride from Antonito, CO to Chama, NM. We will be going from Denver to Alamosa, CO on Sat. Sept. 30. On Sun, (Oct 1) we will go to Antonito and take the narrow gauge train Over Cumbres Pass to Chama. If my crystal ball is correct it will be the peak of the aspen season and there will be lots of picture opportunities. We will return by bus to Antonito and then back to Alamosa for Sun. night. We plan to return to Denver by noon on Mon., Oct. 2. On our way to Alamosa we will stop in Fairplay to see the gold placers near and at the Sand Dunes National Monument. Costs for the trip will be \$215 per person (based on double occupancy). Some single rooms are available for an additional \$15 per night. So, what are you going to get for your money?? Transportation down and back via vans equipped with our new radios so we can talk back and forth, lunches and coffee breaks on Saturday and Sunday, lodging in Alamosa for 2 nights (with continental breakfast), two diners, and the train ride. Please let me know if you want to go because I only have 20 train tickets! (Email, phone, fax, snail-mail, whatever). I will email all participants with details on departure time and place. (For more info on the train ride check out [www.cumbrestoltec.com](http://www.cumbrestoltec.com) and [narrowgauge.org](http://narrowgauge.org))

Sherm Marsh  
CSS Field Trip Chairman  
8384 W. Iliff Ave.  
Lakewood, CO 80227  
**Phone:** 303-986-0939  
**Fax:** 303-986-5433  
**email:** [spmarsh@earthlink.net](mailto:spmarsh@earthlink.net)



**Yes, I want to go on the Colorado Scientific Society spectacular train and aspen field trip. Please reserve my space.**

**Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Email:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

## **COLORADO SCIENTIFIC SOCIETY 2000 FAMILY NIGHT**

Registration Form

Please **print** the information requested below. Please send form by September 12, 2000.

Name: \_\_\_\_\_

Number of tickets \_\_\_\_ @ \$17 for a total of \$\_\_\_\_\_

***Dinner will be buffet style and offer chicken picatta, beef tips in burgundy wine sauce, garden salad, new potatoes, green bean almondine, dinner rolls, and drinks.***

Make checks out to Colorado Scientific Society and send to

Mark Hudson  
U.S. Geological Survey  
Box 25046, MS 980  
Denver Federal Center  
Denver, CO 80225.



## Museums

**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 Red Rocks Elementary School Cafe, in Morrison starting at 7 p.m.

## Earth Science Meetings and Talks

**Colorado Scientific Society's** regular meetings are held the third Thursday of the month (unless otherwise advertised). Social time begins at 7:00 p.m. and presentations start at 7:30 p.m. For information, contact Mark Hudson at (303) 236-7446 or [mhudson@usgs.gov](mailto:mhudson@usgs.gov).

**Denver International Petroleum Society (DIPS)** meets the 2<sup>nd</sup> Friday of each month at the Wynkoop Brewing Co., 18<sup>th</sup> 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 leaving message at (303) 623-5396. 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: \$15 for lunches; talk only is available for \$2 (make checks payable to "D.I.P.S."). 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 Piper, (303) 932-0134, or the website <http://www.dregs.org>.

**Colorado School of Mines Lectures** -For Heiland Lectures at 4:00 p.m. on Fridays, contact Michelle Szobody (303) 273-3451. For information on Van Tuyl Lectures, call the Dept. of Geology at (303) 273-3800.

**Colorado State University Geology Lectures** -Mondays, 4:10 p.m. in room 109 or 316 of the Natural Resources Building. Call the Dept. of Earth Resources at (970) 491-5661 for further details.

**University of Colorado at Boulder, Geological Sciences Colloquium**

Wednesdays, 4:00-5:30 p.m., Rm. 180. For schedule, contact Kathy Madsen 303-492-8141.



# COLORADO SCIENTIFIC SOCIETY

## 2000 DUES AND MEMORIAL FUND CONTRIBUTIONS

(Last Name)	(First Name)	(Initial)	(Telephone)
_____			<input type="checkbox"/> Check if new address information
(Mailing Address)		(E-mail Address)	

**I WOULD LIKE TO RECEIVE THE NEWSLETTER BY EMAIL AS A PDF FILE (IN LIEU OF A PAPER COPY) AND SAVE THE SOCIETY TIME, MONEY, AND A FEW TREES.**

**DUES:** Dues are for the calendar year and help support the monthly meetings and newsletter, field trips, family night, student night, and the annual Emmons Lecture.

Regular Members (\$15)	.....	_____
Corresponding Members (\$10)	.....	_____
Student Members (\$5)	.....	_____

**MEMORIAL FUNDS: Supports** earth-science research grants to graduate students.

If not specified as to the fund, contribution will be distributed equally:

(A) Ogden Tweto Memorial Fund	.....	_____
(B) Steven Oriel Memorial Fund	.....	_____
(C) Edwin Eckel Memorial Fund	.....	_____
(D) Bill Pierce-Heart Mountain Fund	.....	_____
(E) George Synder Memorial Fund	.....	_____

This contribution in memory of \_\_\_\_\_

**ENDOWMENT FUND:** Funds are used to support the Society's operations and special activities:.....

\_\_\_\_\_

**TOTAL CONTRIBUTION (DUES AND FUNDS):** .....

\_\_\_\_\_

Please make your dues and/or contribution checks payable to the Colorado Scientific Society and specify the Fund(s) to which you are contributing.

All Colorado Scientific Society activities depend on volunteer help. Please mark those activities that you can help with. We will pass your name on to the appropriate Committee Chairperson.

- |                |              |                 |               |
|----------------|--------------|-----------------|---------------|
| Audio Visual   | Fund Raising | Newsletter      | Science Fair  |
| Geologic Signs | History      | Science Program | Student Night |
| Field Trips    | Membership   | Publicity       | Web Site      |

**Send this form & your check to: Colorado Scientific Society**  
**P.O. Box 150495**  
**Lakewood, CO 80215-0495**



## Colorado Scientific Society Officers, Councilors, and Chairpersons

### OFFICERS

**President:** Mark Hudson, USGS, 236-7446  
**President-Elect:** Michele Tuttle, USGS, 236-1944  
**Treasurer:** Michael N. Machette, USGS, 273-8612  
**Secretary:** Stephen F. Personius, USGS, 273-8611  
**Past President:** Ken Pierce, USGS, 236-1244

### COUNCILORS

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**1998-2000:** Parker Calkin, CU, 442-2184  
**1999-2001:** Emmett Evanoff, CU, 492-8069  
**1999-2001:** Steve Sonnenberg, 839-3012  
**2000-2002:** Paul Welmer, CU, 492-3809  
**2000-2002:** Scott Lundstrom, USGS, 236-7944

### COMMITTEE CHAIRPERSONS

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**Best Paper Award:**  
**Field Trips:**  
**History:**  
**Membership:**  
**Memorial Funds:**  
**Memorial Funds Treasurer:**  
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**Program:**  
**Publicity:**  
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**Margaret Hiza, USGS, 236-0075**  
**Eric Nelson, CSM, 273-3811**  
**David Moore, USGS, 236-1271**  
**Bill Wingle, CSM, 273-3905**  
**Lee-Ann Bradley, USGS, 273-8613**

**\*\* NOTE: Please help us with publicity by posting copies of the Newsletter on bulletin boards.**

