



Geological Society of Nevada Southern Nevada Chapter Newsletter

January 2007

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CSI: Ice Age Las Vegas

Using mammoth teeth to improve Earth Science education in Southern Nevada

SPEAKER: Dr. Steve Rowland, Professor of Geology at UNLV

DATE: Thursday, January 25, 2007

LOCATION: LFG Rm. 102

TIME: Social half-hour at 6 pm
Meeting business at 6:30 pm
Talk at 6:45 pm

SPONSOR: Open

Geological Society of Nevada, Southern Nevada Chapter

University of Nevada, Las Vegas
4505 Maryland Parkway, Box 4010, Las Vegas, NV 89154-4010
<http://geoscience.unlv.edu/GSN/gsnsc.htm>

A New Year has begun, and there are many exciting opportunities on the horizon for GSN Southern Nevada Chapter members. This spring chapter members will have a chance to participate in several field trips to local sites of geologic interest: (1) At the January 25 meeting, we will be finalizing details for a mid-February trip to see the dinosaur track sites in St. George, Utah. (2) The Spring 2007 GSN Field Trip is scheduled for April 12-13. The first day of this event includes a trip to the Nevada Test Site. And, (3) a field trip/picnic is in discussion for May.

There will also be opportunities this spring for members to develop community partners through science-related service events that can improve the future of science in Southern Nevada. The 18th Annual Clark County Earth Science Education Workshop and the Gordon McCaw Elementary School are both looking for volunteers who are enthusiastic about brightening the horizons of science education for local students and educators by sharing valuable time, knowledge, and skills.

For those interested in giving back to GSN or the SNV chapter, the opportunity to sponsor the January meeting is still available. Meeting sponsors receive complimentary advertising in our monthly newsletter throughout the fiscal year, as well as the comfort of knowing that they have helped our chapter to conserve funds for important student scholarship awards.

Wishing you all a prosperous New Year! -- Lora Griffin

SILENT AUCTION A SUCCESS !

THANKS TO PARTICIPANTS

Thank you to the many members who donated specimens to the Silent Auction of rocks and minerals held at the December 7, 2006 meeting.

The abundance of fine specimens and the interactive format of the sale were complimented by the good-natured competitive spirit of those participating. This made for an activity that was fun for all.

Thank you also, to everyone who attended the meeting and participated in the auction. The event not only generated more than \$250 for the chapter, but also provided an opportunity to inspire new members to join.

Silent Auction donors included:

Robyn Howley
Patrick Haynes
Steve Scott
Bruce Hurley
GSN Elko Chapter

FEBRUARY FIELD TRIP St George area dinosaur track sites

The GSN Southern Nevada Chapter meeting for February will include a field trip to tour the remarkable dinosaur track sites of St. George, Utah. This field trip is tentatively scheduled for one of the middle two Saturdays of the month. Trip details will be finalized during the January 25 meeting. Anyone who prefers a specific day because of scheduling conflicts should bring suggestions or preferences to the meeting or contact Bruce Hurley before this month's meeting at hurley@nv.doe.gov.

SCIENCE EDUCATION VOLUNTEERS NEEDED

Sign-ups open now!

Students and professionals who would like to contribute to the advancement of Earth Science education in Southern Nevada now have an opportunity to support local educators. Bill Durbin, GSN member, Chief of Southern Nevada Operations for Nevada Division of Minerals, and an active member of the Nevada Mining Association Education Committee, told members at the December meeting about many opportunities open to volunteers at the 18th Annual Clark County Earth Science Education Workshop (CCESEW), April 2-4, and as guest speakers for the McCaw School of Mines.

18th Annual Clark County Earth Science Education Workshop, April 2-4

The CCESEW workshop is designed to introduce local teachers, K-12, to innovative techniques and creative ideas which can help to make learning Earth Science informative and fun. This program provides participants with interactive information sessions and field trips to nearby geologic sites.

Gordon McCaw Elementary School Earth Science Guest Speakers Needed

Another community service opportunity described by Durbin, a member of the McCaw School of Mines Foundation Board, was the possibility of providing regular guest speaker sessions on various earth science topics to the fourth and fifth grade students at Gordon McCaw Elementary School.

The school is hoping to find enough interested volunteers to provide monthly or bi-monthly presentations. The presentations would typically involve 4 one-hour sessions of hands-on activities and, preferably, lots of "show and tell" for 110-120 fourth and/or fifth grade McCaw students.

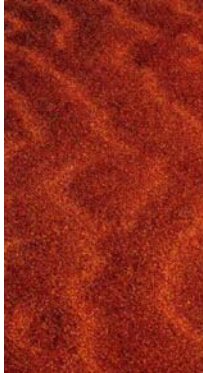
These programs rely on the volunteer support of local students and professionals for their success. Those interested in taking part in the workshop contact jkaufman@nevadamin.org and those interested in becoming a guest speaker for McCaw students contact bdurbin@govmail.state.nv.us.

MEETING SPONSORS ADVERTISING

**The opportunity to sponsor the
January 25 meeting is still open!**

would like sponsor a social hour at one of our GSN Southern Nevada Chapter meetings or would like to place a "Paid Advertisement" in our monthly newsletter should contact Bruce Hurley at (702) 295-1284 or hurley@nv.doe.gov.

Meeting sponsorship has always been important to the goal of keeping operating costs to a minimum to ensure that funds are available for chapter functions and scholarship awards. Now, in appreciation, **meeting refreshments sponsors receive newsletter advertising** on our "Meeting Sponsors" list through the end of the fiscal year. Businesses or individuals who



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UPCOMING EVENTS

- January 25:** Meeting - Steve Rowland
CSI: Ice Age Las Vegas
- February:** Field Trip - St. George dinosaur tracksites
(Details to be finalized at January meeting)
- March 29:** Meeting – Wayne Belcher
Death Valley Regional Groundwater Flow Model
- April 12:** Spring 2007 GSN Field Trip Day One – Nevada Test Site
April 13: Spring 2007 GSN Field Trip Day Two – TBA

CSI: Ice Age Las Vegas **Using mammoth teeth to improve Earth Science education** **in Southern Nevada**

Dr. Steve Rowland, Professor of Geology at UNLV

Abstract

Las Vegas Valley is rich in Pleistocene mammal fossils, especially Columbian mammoths. More than 100 mammoth molars and portions of molars have been recovered from a single site, the Gilcrease Mammoth Site in northern Las Vegas Valley. Data from such a rich collection of teeth can be used to test hypotheses about the extinction of mammoths and other members of the Pleistocene megafauna. With a little training, even an igneous petrologist or hydrologist (maybe even an engineering geologist) can learn to interpret a mammoth tooth. I have developed a teaching unit for high school teachers in the CCSD using casts of Gilcrease mammoth teeth. In my GSN presentation I will show portions of a teaching video that I produced (titled "CSI: Ice Age Las Vegas"), and GSN members will get some hands-on experience interpreting mammoth teeth.

Background

Steve Rowland is a Professor of Geology at UNLV. He is a paleontologist who divides his research energies between Cambrian invertebrates, Pleistocene mammals, and the history of geology.