

# Geological Society of Nevada Southern Nevada Chapter

**Newsletter** 

January 2006

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### **HOST**

Volunteers Anyone?

## Collecting Early Middle Cambrian Trilobites: Bright Angle Shale Formation (Pioche Shale), Frenchman Mountain, Nevada

**SPEAKER:** Jerome McCartney, CCSN Biology Instructor

**DATE:** Thursday, January 26, 2006

**LOCATION:** LFG Rm. 102 (Note Room Change)

**TIME:** Social half-hour at 6 pm

Meeting business at 6:30 pm

Talk at 6:45 pm

**SPONSOR:** None

#### 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

I hope that everyone had a great New Year! We look forward to an exciting 2006 for GSN in Nevada. Upcoming for this year are new officer elections, the Lake Mead Field Trip, and great talks. As an organization we will continue our strive to be successful and plan to increase cooperation with other GSN chapters and the main organization in Reno. As usual we welcome and

encourage new visitors to our GSN chapter and hope that more members will become active participants in meetings and field trips. Note that the room location of our meetings has changed back to room 102 in LFG. We are also desperately looking for a new host, unfortunately we will not have refreshments until someone volunteers.

Happy New Year,

Robyn

## ANNOUNCEMENTS

We apologize for having to cancel our holiday party at the last minute and we hope that this didn't inconvenience anyone. We will let everyone know if the party is going to be rescheduled.

Lora Griffin has agreed to become our new newsletter editor starting in February 2006. Lora is currently an undergraduate geology major at UNLV and is also writes for the Rebel Yell's weekly science column. We will introduce her at the January meeting!

We are soliciting nominations for our chapters' officer positions. Please have nominations in by March 23, 2006. If you want more information regarding what we do please contact any of the current officers. We encourage anyone who wishes to participate in GSN to consider being an officer.

# SPRING 2006 FIELDTRIP

We are in the process of planning our Spring 2006 field trip entitled "Geologic History of the Lake Mead Region." The trip is scheduled for Saturday April 29, 2006 from 8 am until 6 pm. We are in the initial planning stages and will keep everyone updated. If you wish to help with the trip please contact us, you don't have to be a member to help out or attend the trip!

## **ADS & SPONSORS**

GSN is a non-profit organization and our chapter relies on meeting sponsors and advertisements to keep our chapter up and running. If your business would like to sponsor social hour at one of our southern Nevada chapter meetings or place an ad in our newsletter please contact Robyn Howley.

## PARKING

For information on parking at UNLV please visit the UNLV parking services website at <a href="http://parking.unlv.edu">http://parking.unlv.edu</a>. This site also includes maps of the campus and directions. We want to make sure that everyone has a place to park for our meetings.

## **MEMBER NEWS**

Melissa Hicks (our Secretary and Hostess) will be defending her dissertation at 9 am on Friday January 13, 2006. Please come by the department and support our secretary as she finishes her PhD at UNLV. After finishing Melissa will be heading to ExxonMobil in Houston.

Paul Bowen, our treasurer, will be heading to Mexico to work on the Pitarrilla Project in Durango for Silver Standard Resources. The La Pitarrilla exploration project contains economically significant silver mineralization hosted in Tertiary-age, high-level felsic intrusive rocks that were emplaced into a block-faulted package of andesitic rhyodacitic tuffs capped by a brecciated rhyolitic flow and underlain by a thick sequence of volcaniclastic sedimentary rocks. Paul will be further defining the mineralized zone/s and attempting to define them visually. So far they have not been defined visually, but only by assay. There will be a lot of detailed work trying to connect the whole rock geochemistry and microscope work with what has been discovered to date. Visit the Silver Standard web site for more information:

http://www.silverstandard.com/s/Home.asp.

If you have member news that you would like to share in this newsletter please contact us.

# **UNLV** Recycles

Did you know that UNLV has a very

successful recycling program that you can take part in? Called the Rebel Recycling Program, they pick-up material throughout the university but they also have large bins where the public can drop off their recyclable material. Items that are accepted include: aluminum, plastic (#1 & #2), steel/tin, mixed paper, paperboard, and cardboard. The "Drive By and Drop Off" station is located just off Flamingo Rd. behind the large solar panels and near the Boys and Girls Club. Just drive up and place your separated material into the correct bins! For more information visit http://www.unlv.edu/facilities/recycling/ and for map http://www.unlv.edu/facilities/plancon/map.html.

# UPCOMING EVENTS

- 2-23: Meeting Maxwell Blanchard
- 3-23: Meeting Adam Simon *Officer Nominations Due*
- 4-27: Meeting Graduate Student Presentations
- 4-29: Spring 2006 Field Trip "Geologic History of the Lake Mead Region"
- 5-25: Meeting TBA

  Officer Elections (e-vote)

# Collecting Early Middle Cambrian Trilobites: Bright Angle Shale Formation (Pioche Shale), Frenchman Mountain, Nevada

Jerome McCartney, CCSN Biology Instructor

#### **Abstract**

At the west end of Frenchman Mountain, Nevada within the Bright Angel Shale Formation there is an exposure of the Pioche Shale which contains five Early Middle Cambrian faunas. These five faunas include Bristolia sp., Biceratops sp., Nephrolenellus multinodus, Olenellus gilberti, and Albertella schenki. This exposure of the Pioche Shale dates back approximately 540 million years before the present during the Paleozoic Era (Early Middle Cambrian Period) at which time Nevada was completely covered by a warm, shallow ocean containing a variety of ancient marine invertebrate organisms. Found within the Pioche Shale are several species of extinct trilobites.

The excavation site, which is accessible easily by foot, is a 12-meter thick interval which contains the extinct trilobite Olenellus gilberti and is easily extracted with minimal paleontological field equipment.

This extinct species of trilobite is actually an impression of the organism as it was rapidly buried by ocean sediment (mud). Being an arthropod, the exoskeleton material was periodically molted (shed) by the organism thus providing an excellent opportunity for the exoskeletal material (chitin) to fossilize - in this case, to leave behind multiple impressions of a single organism. O. gilberti became extinct towards the end of the Cambrian Period. Other species of trilobite went extinct towards the end or at the end of the Permian Period, perhaps the victim of the Permian-Triassic extinction event!

## Speaker's Background

Jerome received his AA degree in Geology from Citrus College in Glendora, California in 1976, his BS in Biology from California State University Stanislaus in 1978, and his MS in Biological Oceanography from the Scripps Institution of Oceanography at the University of California San Diego in 1981. Currently Jerome teaches biology and paleontology at CCSN as an adjunct instructor, and paleontology as an adjunct instructor for Educational Outreach at UNLV. Previously teaching experiences include geology and paleontology for Adventure Recreation for Clark County Parks & Recreation.

Jerome currently holds the elected position of State Adjunct Representative for the State Board of the Nevada Faculty Alliance for the 2005-06 academic year. He is currently a volunteer with the U.S. Geological Survey. Previous volunteer experience includes the Las Vegas Natural History Museum, Red Rock Canyon National Conservation Area and Lake Mead National Recreation Area. Jerome is currently an active member of the U.S. Navy Reserve (over 25 years) teaching marine & coastal geology, marine meteorology, biological oceanography, marine navigation, and naval leadership. Holds U.S. Navy Diver certification and is a members in many professional organizations.

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