

# GEOLOGICAL SOCIETY OF NEVADA NEWSLETTER

Geological Society of Nevada, PO Box 13375, Reno, NV 89507 (775) 323-3500  
Office Location: Laxalt Mineral Research Center, Room 266, UNR Hours Monday - Friday 8-3  
Website: [www.gsnv.org](http://www.gsnv.org) • E-mail: [gsn@gsnv.org](mailto:gsn@gsnv.org)



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**Kathy Sestanovich**  
[gsn@gsnv.org](mailto:gsn@gsnv.org)

## CALENDAR OF GSN EVENTS

- Nov. 12  
Wednesday** **WINNEMUCCA CHAPTER** (*Every 2nd Wednesday of the month*)  
The monthly meeting will be held at the Martin Hotel, 94 West Railroad Street. Drinks and appetizers at 6:30 PM, speaker at 7:00 PM. Sponsor for the evening is CGS, Inc. represented by Chad Christensen and/or Janette Steele. Speaker for the evening is Jeffrey L. Mauk. His talk will be titled "Epithermal Au-Ag Deposits of New Zealand" (see abstract on page 5). For more information contact John Marma at (775) 635-6472.
- Nov. 20  
Thursday** **ELKO CHAPTER** (*Every 3rd Thursday of the month*)  
The monthly meeting will be held at the Western Folk Life Center, 501 Railroad Street beginning at 6:00 PM, speaker at 7:00 PM. Sponsor for the evening is Enviroscientists, Inc. The speaker for the evening will be Warren Thompson of Fronteer Development Group. Topic will be "Long Canyon Project: A New Paradigm For Nevada Gold Exploration". For more information contact Moira Smith at (775) 934-2987.
- Nov. 21  
Friday** **GSN BOARD OF DIRECTORS MEETING** Quarterly meeting to be held at Mine Development Associates' office at 1:00 PM.
- GSN MEMBERSHIP MEETING** (*Every 3rd Friday of the month*)  
The monthly meeting will be held at the Reno Elks Lodge, 597 Kumle Lane, Reno, NV. Drinks at 6:00 PM, dinner at 7:00 PM, and talk at 8:00 PM. Co-sponsors for the evening will be Western Uranium Corporation and GIS Land Services. Speaker for the evening will be Raul Madrid of Victoria Resources US Inc. His talk will be titled "Structural Systematics: Methods to Enhance Evaluation of Targets and Definition of Gold Concentrations". For reservations contact Kathy Sestanovich at (775) 323-3500 or e-mail [gsn@gsnv.org](mailto:gsn@gsnv.org).
- Nov.  
(Date to be announced)** **SOUTHERN NEVADA CHAPTER** (*Usually the last Thursday of the month*)  
The monthly meeting will be held at UNLV, Lily Fong Geoscience Building, Room 105, Las Vegas, NV beginning at 6:45 PM. See the GSN website for details. For more information contact Josh Bonde at (702) 468-2500.

## FROM THE PRESIDENT

Marcus Johnston, *GSN President 2008-2009*

Mike Ressel organized our Fall 2008 Field Trip, with visits to the Mount Hope molybdenum deposit, Eureka base metal mines, and the Robinson skarn and porphyry copper deposit. The field visits were especially informative, and were supplemented by field and evening presentations from several experts on the various deposit types. Thanks to all who attended and/or helped out with the trip, including our various guides, and especially to our trip sponsors AMEC, ALS Chemex, Barrick Gold Corp, Legend Inc., and Newmont Gold Corp.

Thanks also to all who attended our October meeting in Reno. Greg Arehart presented the results of low-temperature geochronological and isotopic studies at the Pipeline deposit, and isotopic and geochemical studies at the Chukar deposit, both in northern Nevada. Low-temperature geochronology can help pin down the timing of mineralization, and helps to identify other thermal events that affected the same area. Analysis for oxygen isotopes in carbonate host rocks shows promise to become an important exploration tool in the near future. Kappes, Cassidy & Associates graciously sponsored the drinks for the evening.

(Continued on page 2)

## GSN NOVEMBER MEETING CO-SPONSORS



**Western Uranium  
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**Western Uranium Corporation**  
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# News and Announcements

(Continued from page 1)

The student turnout was again high, and was highlighted by a mineral auction to support the Mackay Rockhounds, the University of Nevada, Reno student chapter of the American Institute of Professional Geologists. Richard Harris conducted supplementary, and highly entertaining, verbal auctions for two commemorative coins from Round Mountain and a gold splatter from Newmont. The Rockhounds will use the proceeds from these auctions to help fund a number of informal weekend field trips, which will be open to others interested in keeping up on the 10-hour hikes with these young geologists and engineers. I plan on tagging along in the future, just to keep an eye on the camp while they are off wandering, as long as the cooler is full and there is a stream nearby where I can get my line wet!

The 'new website' mentioned in the August Newsletter is officially up and running. The latest version was uploaded to the web on Thursday, October 16, and will be an ongoing work-in-progress designed to become a major resource for GSN members. I am encouraging you to take a little time to navigate the site, and to send any questions or comments, as well as appropriate material for the site (photos, announcements, etc.) to Kathy at [gsn@gsnv.org](mailto:gsn@gsnv.org). Dave Emmons is the "Face of GSN" for November, and Raul Madrid is our speaker. Raul will discuss his proprietary Structural Systematics methods in the context of Nevada geology and exploration.

Finally, D.D. Lapointe is spearheading the Christmas auction to benefit the GSN Foundation. Please contact her if you have any significant mineral and/or ore specimens, older books/reports, or other artifacts that you may be willing to donate. Have a great Thanksgiving, and in the meantime, I hope to see many of you at the November meeting in Reno!

Be safe,  
Marcus

## Dues Renewal Deadline is December 20, 2008

You can renew your dues now by downloading the form from the new GSN website:  
<http://www.gsnv.org/membership.html>

Please make sure to update all information. Please consider making a tax-deductible donation to the GSN Foundation. Foundation dollars are used exclusively for the K-12 grade Field Trip Grant Program, Nevada Mapping Grants and UNR scholarships.

Also, please consider donating to the Student Dinner Fund, which is used to purchase dinner for students who attend the monthly membership meetings.

## GSN MEMBERS' PERSONAL NOTES & NEWS

W. Dan Hausel ([DiamondProspector@live.com](mailto:DiamondProspector@live.com)) has opened a consulting office in Gilbert, Arizona after working for the Wyoming Geological Survey for 29 years. In 2008 he consulted for Black Range Minerals from Perth on a number of gold and base metal projects. Previously, he worked as Exploration Manager and VP of Exploration for DiamonEx Ltd from Sidney and established a US subsidiary. During this work he discovered an attractive diamond target and a number of nearby kimberlites. He is currently investigating more than 300 cryptovolcanic structures in the Wyoming Craton and is finalizing a book on his discovery of two world-class colored gemstones deposits in the Wyoming Craton. Dan was notified that he will be included in the 2009 editions of *Who's Who in Science & Engineering*, *Who's Who in America*, and *Who's Who in the World*.

Jane Marie Zimmerman, 53, died suddenly at her home in Nucla, Colorado. Jane had been a geologist working in Nevada, Arizona, Utah and Colorado. She lived in Elko in the 1980s and 1990s to around 2003, and had worked for Western States, Barrick, and at other area mines. Since about 2003, Jane had been semi-retired, raising fruit on her farm in Nucla and working part-time as a contract geologist in Utah, Nevada and Colorado. A memorial service was held for her on Saturday October 4, 2008.

## UPCOMING EVENTS

- Nov. 7 Adam Simon**, Department of Geoscience, UNLV, "Layered Mafic Intrusions and PGE Deposits: An Experimental Perspective". Friday at 3:00 p.m. in Room 353 of the Laxalt Mineral Research Building on the UNR campus.
- Nov. 14 Paula Noble**, Department of Geological Sciences and Engineering, UNR, "The Roberts Mountains Allochthon and Paleontology of Upper Plate Rocks". Friday at 3:00 p.m. in Room 353 of the Laxalt Mineral Research Building on the UNR campus.
- Nov. 21 GSN Board of Directors Meeting**. Meeting to be held at Mine Development Associates' office at 1:00 PM.
- Nov. 21 SME - Patty Maloney**, Chief Engineer - Marigold Mine, Goldcorp, Inc. "Marigold Mine - The Successful Transformation into a Major Heap Leach Operation", held at 12:00 noon at Denny's, junction of I-80 east and East McCarran.
- Nov. 21 Mark Coolbaugh**, Great Basin Center for Geothermal Energy, UNR, "Exploration for Geothermal Resources - Field Techniques". Friday at 3:00 p.m. in Room 353 of the Laxalt Mineral Research Building on the UNR campus.

**Thanks to Kappes, Cassiday & Associates  
for hosting the October meeting.**

# GSN November 21, 2008 Membership Meeting

**Date:** Friday, November 21, 2008

**Time:** Social-6:00, Dinner-7:00 (\$17.00), Meeting-8:00

**Reservations:** Phone: (775) 323-3500, Fax: (775) 323-3599,  
E-mail: gsn@gsnv.org

**Deadline:** Reservations by 1:00 PM Thursday, November 20th

**Location:** Elks Lodge, 597 Kumle Lane, Reno, NV

**Directions:** Across (W) from the Reno-Sparks Convention Center  
(S. Virginia Street, behind the Les Schwab Tire Center)

**Speaker/Title:** Raul Madrid, "Structural Systematics: methods  
to enhance evaluation of targets and definition of  
gold concentrations"

See abstract below:

## Structural Systematics: Methods to Enhance Evaluation of Targets and Definition of Gold Concentrations

Raul Madrid

Structural Systematics is the study of structural systems and how they interrelate, both in terms of the stresses and strain that lead to their development, and how their finite strain characteristics can be used to predict their geometries. The use of this series of non-conceptual structural methods is highly dependent on detailed field mapping, objective observations, and the presence of tectonic structures that are throughgoing. The goal of the methods is to provide a foundation for prediction of the geometries and the volumetrics of structural systems. Gold mineralization is highly dependent on these volumetrics inasmuch as hydrothermal fluid flow requires conduits that maximize porosity and permeability for the deposition and concentrations of gold in these systems. Structural conduits and their geometries can be calculated and evaluated for the presence of gold concentrations in the system so long as their widths meet certain criteria and the presence of gold in these structural systems is known with certainty.

Epithermal as well as other types of gold systems can be rapidly evaluated by use of Structural Systematic methods. Rapid evaluations of structural systems are necessary to more cost-effectively focus exploratory drilling. The exploration strategies that should be implemented must include the following:

1) Develop a geologic cadre that can use Structural Systematic methods to first delineate the structural systems that absolutely carry gold, do not conceptualize, use objectively obtained data.

2) Assemble a large group of properties, preferably in gold belts, which have been evaluated for their potential. Diversification is needed for both major and junior mining companies. Focus evaluation of the properties based on structural systematics for targeting.

3) For these properties, apply exploration techniques using Structural Systematics. The emphasis is on confidence and prediction of the geometries of the structural systems and focus on what potential gold concentrations are expected. Decide to what depths it is feasible to drill and use drilling to confirm the occurrence and concentrations of gold.

4) Drilling is almost exclusively diamond core because it provides the greatest amount of information for subsurface calculation and construction of structural systems. Angle drilling provides the greatest testing of real estate, and is thus almost always implemented. Other types of drill methods can be used, but they have limitations, especially early on in the exploration program.

5) Do not use drilling as your primary exploration tool. Your geologists are there to define targets, not the drill rig.

6) A geologist is hired for their brains and not just to fill a work slot. They must be trained in predictive and evaluation techniques.





# FACES OF GSN

## *Dave Emmons, Reno, Nevada*

In 1974, Dave graduated with a BS in Geology from San Diego State University. Upon graduation he had received two job offers; one was for mud logging in Alaska for petroleum and the other was with Tenneco Minerals in Death Valley mining and exploring for borates. Dave accepted the job in Death Valley and with his wife, Denise, moved from San Diego to the Amargosa Valley north of Death Valley Junction. The work was a great way to get started in geology: logging drill cuttings and core, working in a mining and development setting, and geologic mapping. In 1975, Denise and Dave had their first child, Heather, born in Las Vegas. The borate work wrapped up in 1976.

The next opportunity was a brief stint as a mine geologist with Monsanto in Soda Springs, Idaho at the Henry phosphate mine. In 1977, Dave returned to Tenneco Minerals and moved to Tucson, Arizona.

Tenneco had set up a small group of geologists in Tucson to explore and evaluate several million acres of mineral fee land owned by the company in Arizona, New Mexico, California and Oregon. The position was a great opportunity to work in numerous geologic environments and to evaluate numerous minerals. The minerals included uranium, gold, silver, copper, gypsum, perlite and others. The evaluation of the Tucker Hill perlite deposit in Oregon eventually resulted in a new perlite mine. During the couples stay in Tucson, they welcomed two more children, Erik and Melissa.

In 1982, Tenneco acquired Houston Oil and Minerals and Dave was transferred to Denver. After the McCoy property came back to Tenneco in 1985, Dave had the very good fortune to be assigned the exploration of the claim block. Neil Muncaster was VP Exploration and Jeff Wilson was the Exploration Manager. This assignment led to the discovery of the Cove gold-silver mine in 1987. The discovery was basic exploration: stream sediment, soil, rock sampling, geologic mapping and drilling. Jeff Edwards worked with Dave on the exploration including the first drilling. Jeff deserves special credit for encouraging drilling deeper.

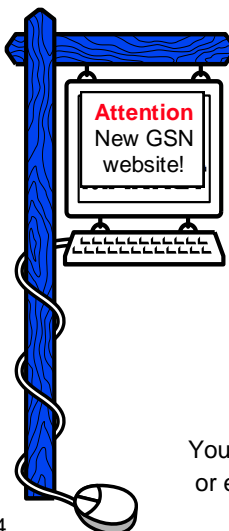
In late 1986 prior to Cove, Echo Bay Mines purchased Tenneco Minerals, which led to the family relocating from Denver to Reno in 1988. During this time with Echo Bay in Reno, Dave was involved with numerous projects throughout the Great Basin. A few of the more interesting projects included Ratto Canyon, Jessup and a final round of exploration at McCoy/Cove from (1988-1991). He also made some trips to Indonesia, the Philippines and Mexico. In 2002 he had a one year assignment at Gold Hill north of Round Mountain.

In 2003, Kinross Gold acquired Echo Bay. That year, Dave was sent to Refugio in Chile and then to Fairbanks for Kinross. After Alaska he settled in Washington at Kettle River doing exploration drilling for the Emanuel North deposit at the K2 mine in the Republic district.

In 2005, Dave took a brief hiatus from Kinross, however, he returned in August 2005 to take on the position as Chief Geologist at the Round Mountain mine (Round Mountain Gold Corp. / Kinross). It was an honor to be associated with the mine and the personnel. This September, he was transferred to Kinross' Reno office to work in exploration in North America.



Dave has been a member of GSN since the mid 1980s. He enjoys the monthly meetings, the friendship of other geologists and occasionally the opportunity to attend a GSN field trip. Also, Denise and Dave have two wonderful grandsons, Dakota and Dax.



## *Geological Society of Nevada has a New Website*

The new GSN website has been published to the Internet. Please let Kathy know if you would like to see additional items added or if you have any ideas, we are open to any suggestions you might have.

[www.gsn@gsnv.org](http://www.gsn@gsnv.org)

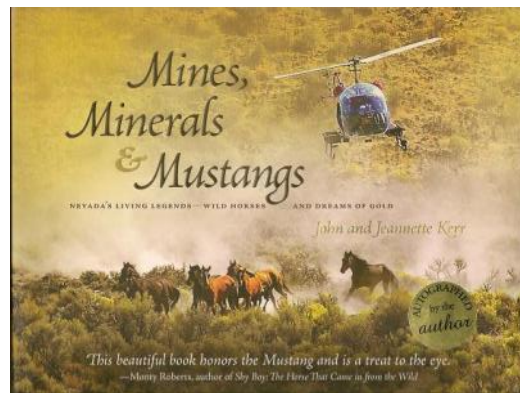
You can reach Kathy at 775-323-3500  
or e-mail [gsn@gsnv.org](mailto:gsn@gsnv.org)

# The GSN Foundation

John and Janette Kerr have donated two autographed copies of their new book, "Mines, Minerals & Mustangs".

There will be a raffle or auction at an upcoming GSN meeting and the proceeds will be donated to the Foundation.

All GSN members will be notified by e-mail or in the next newsletter when the book "Mines, Minerals & Mustangs" will be raffled or auctioned.



## GSN Winnemucca Chapter Meeting November 12

**Epithermal Au-Ag deposits of New Zealand**  
**Jeffrey L Mauk,**  
**The University of Auckland, Auckland, New Zealand**

The Hauraki Goldfield of New Zealand contains about 50 adularia-sericite epithermal deposits with combined total past production and reserves that exceed 10 Moz Au. The largest deposit is the Waihi (Martha) deposit, with past production of over 8 Moz Au.

The goldfield occupies a 200 km long by 40 km wide N-S trending belt of Miocene to Pliocene volcanic rocks in the Coromandel Peninsula of the North Island of New Zealand. Orebodies in the goldfield consist of veins in andesite; less than 10% of production has come from veins hosted by rhyolite. The northern part of the goldfield contains bonanza-grade orebodies at Thames and Coromandel, whereas orebodies in the southern part of the goldfield characteristically consist of relatively thick colloform-to crustiform-banded veins with grades that are commonly 15 ppm or less. The southern goldfield contains over eighty percent of the gold mineralization, even though these orebodies formed in less than ten percent of the time that the goldfield was active. This burst of mineralization may relate to reorganization of the New Zealand plate boundary at approximately 10 Ma.

Vein mineralogy and textures change with depth. Veins that formed at shallow levels typically have fine colloform banding with acanthite and electrum, whereas veins that formed at deeper levels have more coarse-grained quartz and increased concentrations of base metal sulfide minerals.

Orebodies have well-defined alteration halos, with central cores that contain adularia and illite, and larger areas that contain chlorite and interstratified illite-smectite with local calcite. These alteration halos coincide with well-defined geochemical halos, with intense K-metasomatism close to

many veins. Igneous magnetite is completely destroyed by hydrothermal alteration, so orebodies characteristically sit within an extensive zone of demagnetized rocks that is readily detected by aeromagnetic methods. The adularia-illite alteration can commonly be detected by airborne radiometric surveys, and K/Th ratios are particularly useful in distinguishing these areas of potassium metasomatism. Therefore, alteration mineralogy, whole rock geochemistry, and geophysical techniques can all provide useful vectors to help delineate areas of hydrothermal alteration that may envelop orebodies.

### WINNEMUCCA CHAPTER



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### ELKO CHAPTER NOVEMBER MEETING SPONSOR



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Offices are located on the University of Nevada, Reno Campus Laxalt Mineral Research Center, Room 266  
 Office hours: 8 AM - 3:00 PM, Monday through Friday

## GSN DIRECTORY ADVERTISING ORDER FORM

### Final Deadline

**(All advertisements are due no later than December 20, 2008)**

E-mail digital advertisements to: [gsn@gsnv.org](mailto:gsn@gsnv.org)

Date: \_\_\_\_\_

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

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### GOLD PAGES

2" x 3½"	Business Card – Horizontal .....	\$ 50.00	
3½" x 5"	Quarter Page – Vertical .....	150.00	
5" x 7"	Half Page – Horizontal .....	300.00	
3½" x 10"	Half Page – Vertical .....	300.00	
7" x 10"	Full Page – Vertical .....	450.00	
7" x 10"	Opposite, Inside Back Cover – Vertical.....	600.00	
7" x 10"	Qualified Person Page – Vertical .....	600.00	
7" x 10"	Inside Back Cover – Vertical.....	700.00	Sold, No longer available
7" x 10"	Inside Front Cover – Vertical .....	800.00	Sold, No longer available
7" x 10"	Outside Back Cover – Vertical.....	1,000.00	Sold, No longer available

Size of Advertisement	Cost

All advertisements must be camera ready, black and white or submitted as TIFF or JPG digital format. Please send your advertisement and check (payable to Geological Society of Nevada) by December 20, 2008 to:

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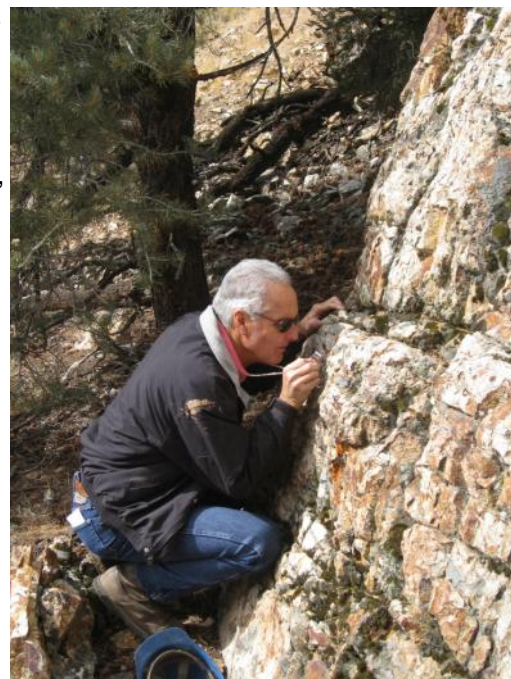


# Fall Field Trip Wrap-up

Mike Ressel

This fall's field trip focused on geologic variations on the intrusion-related ore deposits theme with visits and/or talks on four of central Nevada's base-metal districts. The trip along America's Loneliest Highway coincided with the season's first major cold front, which left a dusting of snow on higher peaks and a crispness and color that only come this time of year. The trip included tours of the Mount Hope Climax-type porphyry molybdenum project, historic base metal carbonate replacement deposits of the Eureka district, and the Robinson copper porphyry and skarn deposits in addition to evening talks on the high-grade copper skarns of Pumpkin Hollow at Yerington and the base-metal and silver mines of Eureka. A guidebook (GSN Special Publication 48) is a product of the field trip and features several papers and maps that focus on the geology of the districts.

As the adage goes, "Old mines never die, they just rest a while," and so the mines of the Eureka, Robinson, and Yerington districts have a long and colorful history dating back to the 1860s and marked by hard work, innovation, and of course, luck, both good and bad. Like most things, these mines expand and contract through the winds of changing economics and the boom and bust cycles that characterize the industry. All of these districts have been re-invented of sorts, Eureka moving from its historic base-metal roots to now focus on Carlin-type gold, Yerington with plans to go deeper and for higher grade copper and possibly, iron, ores, and Robinson, capitalizing on



existing infrastructure and being in the "right place at the right time." In contrast to these old districts, the Mount Hope porphyry molybdenum project, its name befitting its hopeful future, lies quietly under the hill that bears its name, waiting for the thumbs-up signal to start its long mine life, which will come on the heels of feasibility studies, large capital investments, and, of course, permits.



Thanks go to field trip leaders for making things happen: **Hank Ohlin** of Nevada Copper provided a visual tour of Pumpkin Hollow, **Steve Rivera**, **Tom Bidgood**, and staff at General Moly provided a walking tour of Mount Hope, **Peter Vikre**, who gave a thorough geologic and historic account of the old Eureka mines, and **Randal Burns** and staff at Quadra Mining, who guided us through the bustle of active mining at Robinson.

More thanks go to Kathy Sestanovich in GSN's front office for organizing much of the trip and to the field trip sponsors including **ALS Chemex** and **Barrick Exploration** for sponsoring dinners, **AMEC** and **Legend, Inc.**, for sponsoring lunches, and **Newmont Mining Corporation** for supplying companion guidebooks. We also thank **Dana Durgin**, **Marilyn Miller**, and **Don Strachan** for their kind support of students attending the trip.



# ANNOUNCEMENT AND CALL FOR PAPERS



2010 SYMPOSIUM  
May 14 - 22

[www.gsnv.org/Symposium](http://www.gsnv.org/Symposium)  
John Ascuaga's Nugget  
Hotel and Casino  
Reno/Sparks, Nevada

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# GEOLOGICAL SOCIETY OF NEVADA 2010 SYMPOSIUM ANNOUNCEMENT and CALL FOR PAPERS

**THEME: GREAT BASIN EVOLUTION & METALLOGENY**

**WHEN: MAY 14-22, 2010**

**WHERE: JOHN ASCUAGA'S NUGGET  
RENO/SPARKS, NEVADA**

The Geological Society of Nevada invites contributions for oral, poster, and core shack presentations covering a broad range of geological topics for its upcoming sixth symposium. This symposium's focus will be on aspects of Great Basin evolution and metallogeny and will maintain a tradition of excellent oral and poster presentations followed by published symposium volumes, which emphasize descriptive accounts of ore deposits, and new ideas of how deposits formed, why they occur where they do, and how to find them.

Oral and Poster presenters require preparation of an abstract and written paper to be peer-reviewed and later published in the Symposium Proceedings. Core shack presenters are welcome to submit abstracts and written papers, but are not required to do so.

Draft abstracts up to 500 words should be submitted **no later than April 30, 2009**. Written papers should be 4 to 25 typed pages including figures and tables. **Manuscripts are due August 31, 2009**.

Information for contributors is available on-line [www.gsnv.org/symposium/author\\_guidelines/guidelines.aspx](http://www.gsnv.org/symposium/author_guidelines/guidelines.aspx). Abstracts may be submitted on-line or via e-mail. Questions? Contact us at: [symposium2010@gsnv.org](mailto:symposium2010@gsnv.org)

## Technical Program - Sun-Wed, May 16-19

### Great Basin:

- Rumors from the bush – Great Basin exploration update
- New mine developments
- Styles of Tertiary magmatism and metallogenesis
- Geology of Nevada
- Regional metallogeny
- Active or recent gold systems
- Intrusion-related deposits
- A stroll down Walker Lane – Geology and ore deposits
- Volcanic-hosted Au-Ag deposits
- Carlin-type gold deposits
- Out of the box, into the frying pan: Controversies in Great Basin geology
- Student research (competition for Best Student Paper award)
- Mining in the 21<sup>st</sup> Century – environmental and regulatory issues
- Great Basin tectonics
- Geothermal resources
- Case histories of Great Basin discoveries
- Molybdenum and tungsten

### Other Topics:

- Exploration – Americas
- Exploration – International
- New exploration technologies
  1. Remote sensing
  2. Geochemistry
  3. Geophysics
  4. Mapping and logging

## Field Trips (May 14-16 & May 19-22)

### Pre-meeting:

- Introduction to Carlin-type gold deposits for geologists (3 days)
- Epithermal deposits of northern Nevada (3 days)
- Porphyry-related deposits of eastern Nevada (3 days)
- Industrial mineral deposits, southern Great Basin (3 days)

### Post-meeting:

- Introduction to Carlin-type gold deposits for non-geologists (2-3 days)
- Recent advances in Carlin-type deposits, Nevada (3 days)
- Epithermal deposits of central Nevada (3 days)
- Porphyry-related deposits of western Nevada (2-3 days)
- Modern and ancient geothermal systems (2 days)

### Short Courses

- Epithermal Deposits: Occurrences, Models, and Exploration Criteria
- Structural Systematics: Applications for Exploration
- Fundamentals of Canadian National Instrument 43-101
- Introduction to Carlin-Type Gold Deposits
- Not All That Glitters is Gold I: Porphyry Copper Occurrences, Models, and Exploration Criteria
- Not All That Glitters is Gold II: Molybdenum
- Getting the Most from Your Data: Database Management, Geostatistics, GIS, and Modeling
- Sample Collection, Preparation, and Analyses: Methods and Advice
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## Now available at the Nevada Bureau of Mines

**P-19** – Major Mines of Nevada 2007, **\$3.00** or **free on the Web**  
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### **Production and Injection Data for Oil, Gas, and Geothermal Wells in Nevada** (*Web only*)

"The following reports were provided by the Nevada Division of Minerals and scanned by the Nevada Bureau of Mines and Geology. The links below take you to the directories that contain scanned, PDF file format, images of the monthly production and injection reports for the various oil and geothermal fields in Nevada. These reports were scanned in the same order that they were filed. Each directory contains the production or injection information for a specific field or area and each file contains the monthly reports submitted for a single year."

<http://www.nbmj.unr.edu/lists/Production/index.html>

**CD 2008-01** (California Geological Survey) - GIS Data for the Geologic Map of the Lake Tahoe Basin, California and Nevada,  
[http://www.conservation.ca.gov/cgs/information/publications/release\\_statements/Documents/Lake\\_Tahoe\\_Basin\\_GIS.pdf](http://www.conservation.ca.gov/cgs/information/publications/release_statements/Documents/Lake_Tahoe_Basin_GIS.pdf)

Also still available are paper copies of this Lake Tahoe Basin map available for sale: <http://www.nbmj.unr.edu/sales/pbsdtls.php?sku=RGM4>

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(Continued on page 12)



**FOOD BANK**  
OF NORTHERN NEVADA

## Back-Pack Kids

### GSN to hold Food Drives to benefit the Food Bank of Northern Nevada

We will hold a food drive at our November 21<sup>st</sup> meeting to collect food items, small toiletries, backpacks and canvas totes/briefcases to benefit the Food Bank's **Back-Pack Kids** program. This program provides food to homeless children who don't have much to eat over the weekends because they don't have access to school breakfasts and lunches. Look for more details and a list of needed food items in the November newsletter. In the meantime, please be thinking about rounding up all of those rarely used canvas bags and briefcases from conferences you have attended over the years.

The Winnemucca Chapter will be holding their first food drive for the **Back-Pack Kids** program at their December 10<sup>th</sup> meeting.

### GSN Back-Pack Kids Food Drive Requested Items

- Backpacks, canvas briefcases & totes with geologic/mining logos (You probably have a closet-full of these things from conferences!)



- Kid-Friendly Individual Food Items:

- ⇒ Easy Mac cups or packages,
- ⇒ Individual cups or pouches of tuna
- ⇒ Granola bars
- ⇒ Individual hot cocoa packets
- ⇒ Single-serving peanut butter packets

- Personal care items:

- ⇒ Toothbrushes
- ⇒ Toothpaste
- ⇒ Chapstick
- ⇒ Shampoo and soap (Please collect these items from motels/hotels when you travel!)



## Mining for a Minerals Dependent World

December 1 - 5, 2008

John Ascuaga's Nugget Casino Resort  
Sparks (Reno), Nevada



## Northwest Mining Association and Geological Society of Nevada Field Trips

Field Trip #1 - Winnemucca, Nevada

December 5-7, 2008

Visits will be made to Cortez Mine and Twin Creek Mine

Field Trip #2 - Tonopah, Nevada

December 5-7, 2008

Visits will be made to Round Mountain and Yerington Copper

Field Trip #3

Steamboat Springs, Nevada

December 6, 2008

Visits will be made to the Steamboat Springs Geothermal Plant

*(See page 12 for more details on the field trips.)*



(Continued from page 10)

**Free books to a good home**

Gina Tempel donated the following books. Free copies (one of each different book per customer) are available in our office (SEM 310), and we can also mail them to you for the cost of the shipping (please call us for a shipping quote). If mailed with an order for NBMG publications, we will have to increase the shipping amount to offset the extra weight of these books. If you are interested in seeing the table of contents of these books, please e-mail us and we will send you the file with this information.

Western Geological Excursions: 1984 Annual Meetings of the Geological Society of America and Affiliated Societies at Reno (Volumes 1-4)

Crustal Evolution of the Great Basin and the Sierra Nevada: Field Trip Guidebook for the 1993 Joint Meeting of the Cordilleran/Rocky Mountain Sections of the Geological Society of America, Reno, Nevada, May 19-21, 1993

**2009 Nevada Historic Mining Calendar**

The theme of this year's calendar is Pioneer, Nevada (north end of the Bullfrog Mining District). These calendars are a cooperative effort of the Keck Museum and the Northern Nevada Section of the Society for Mining Metallurgy and Exploration. "Funds donated for the purchase of the calendars are used for scholarships and scholastic functions. To order Nevada Historic Mining calendars, write or call the Northern Nevada Section of SME, 1790 Brunetti Way, Sparks, NV 89431, phone 775-358-2723. Checks should be made to the Northern Nevada Section of SME." The calendar is **\$9.00** (no shipping charge).

**"OneGeology is an international initiative of the geological surveys of the world and a flagship project of the 'International Year of Planet Earth'.** <http://www.onegeology.org/>

For anyone interested, 3 volumes entitled "Programmatic Environmental Impact Statement for Geothermal Leasing in the Western United States" <http://www.epa.gov/EPA-IMPACT/2008/June/Day-13/i13365.htm>



It is that time of the year to consider gift giving. If you have any geologic books that you are considering giving away please contact Clancy Wendt. GSN and the Tucson Gem and Mineral Society have given over 35,000 books to Universities in Mexico. This is a tax deductible item and anything you have will be greatly appreciated as Mexican Universities have very little in the way of reference books. 775-852-2513

(Continued from page 11)

We welcome you to join us on the upcoming Northwest Mining Association/Geological Society of Nevada Field Trips being run in conjunction with the NWMA meeting being held December 1-5, 2008 in Reno, Nevada. Three field trips are planned at this time:

- Trip 1** Will depart Friday afternoon, December 5th and stop in Winnemucca, Nevada, the base camp for the mine tours on Saturday and Sunday. We will tour the Barrick's Cortez Mine on Saturday, December 6th and Newmont's Twin Creeks Mine on Sunday, December 7th. The bus will return to Reno Sunday evening.
- Trip 2** Will also depart Friday afternoon, December 5th and travel to Tonopah, the base camp for the mine tours on Saturday and Sunday. Saturday December 6th we will tour the Round Mountain Mine (a Kinross Gold/Barrick Gold JV). Sunday morning we depart for Yerington, Nevada with stops at Nevada Copper and Quaterra Resources (including a tour of the McArthur Pit, weather permitting) before returning to Reno.
- Trip 3** This is a one-day trip departing on Saturday, December 6th. Ormat Technologies will provide a tour of their Reno Steamboat Springs Geothermal plant and weather permitting the alteration associated with the hydrothermal system.

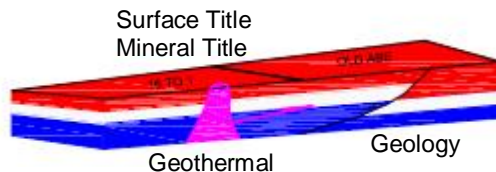
Look for more details and a sign-up sheet to be sent out shortly via email.

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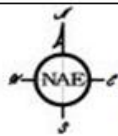
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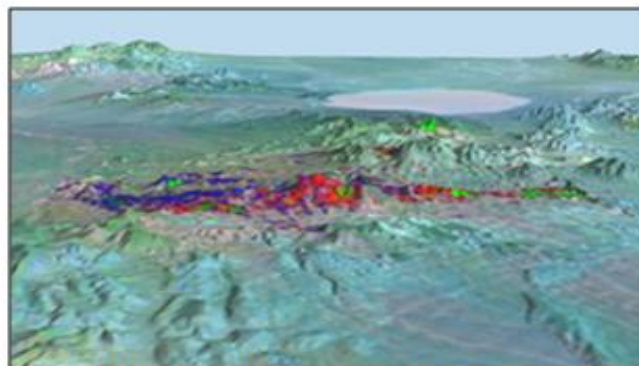
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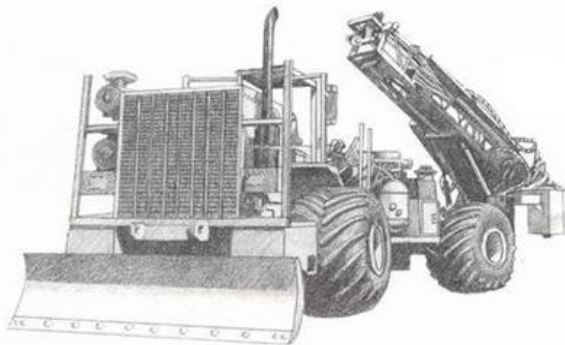
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