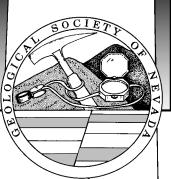
GSN NEWSLETTER

August 2000, Vol. 14, No. 6



CALENDAR OF EVENTS

PRESIDENT Ken Cunningham Nevada North Resources USA Inc. kdc-miner@juno.com

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PUBLICATION CHAIR Camille Prenn Mine Development Associates cami@mda.com

OFFICE MANAGER Donna Bloom gsn@mines.unr.edu

GSN WINNEMUCCA CHAPTER: Red Lion Inn, Humboldt Room, Aug 2 Winnemucca, NV; Speaker - Antonio Arribas, Giant Au and Ag epithermal deposits, what do they look like, where do you find them? Bruce Braginton, 775/625-5606 for information.

Sept 30-GSN FALL FIELD TRIP: Northern Mother Lode, Sixteen to 1 Mine. Oct 1 More details in September newsletter.

Oct 7 GSN ANNUAL PICNIC at Bowers Mansion, Washoe Valley (south of Reno) 12:00 noon.

Oct 20 GSN MEMBERSHIP MEETING AND DINNER: At Elks Club, Reno, NV.

> Visit our web site: www.gsnv.org

GSN Newsletter is published monthly except June and July Geological Society of Nevada, PO Box 12021, Reno, NV 89510-2021 USA, 775/323-3500

PRESIDENT'S MESSAGE

Ken Cunningham, GSN President 2000-2001

Welcome to a new year of GSN activities, dinners and newsletters. I had hoped that I could announce resurgence in exploration that was coupled to a long awaited soaring gold price. Unfortunately, our industry continues to struggle, as do many of our members. As such, I can promise no increase in dues for the 2000-2001 year (read my lips). We are a unique group of professionals and GSN is the best society that I have had the opportunity to be associated with. I want to thank all the members and sponsors for continuing to support GSN and for helping us to grow and to take on new challenges. I also would encourage all members to stop by the GSN office and introduce themselves to Donna Bloom, our new Office Manager.

GSN is moving into it's 44th year and now has chapters in Winnemucca, Elko and Las Vegas. Those of you that patronize the motels of these cities should consider joining the local chapters. Numerous interesting talks and field trips (not to mention pig roasts) are part of the local chapter's activities.

As most of you know, the recent GSN symposium was a sound success. Thanks to all the volunteers, contributors

and sponsors. The recently formed GSN Foundation is also up and running and beginning to collect donations that will be used in part for educational purposes.

Hoping to compete with all these recent successes, the GSN officers are working hard to put together a slate of interesting talks and field trips. I for one am looking forward to tasting some of the red gold being produced in the Mother Lode region of California!

We will start off the year with a meeting on Friday, October 20. Teck Resources has graciously agreed to give a presentation on the Pogo deposit. They are currently underground and in the ore zone. Eklund Drilling is sponsoring the bar so I hope to see a large turn out. Other topics for later meetings will include Placer Dome's new discovery in Crescent Valley and Pacific Rim's Luicho project in Peru. I hope that new talks on gold exploration and discoveries around the world will promote record attendance for our dinner meetings and inspire interesting discussions.

I hope everyone has a good year and enjoys the programs and social events. Who knows, maybe this is the year that gold prices will rebound?





"Thank you" to the chairs of a very successful Symposium!

GSN 2000 GOLF TOURNAMENT RESULTS

Roger Steininger, Consultant

Fifty-two golfers participated in this year's GSN Golf Tournament, sponsored by Eklund Drilling Co., and held at Sierra Sage Golf Course. In the men's division, the first place team included Bill Oriel, Bob Thomas, Dan Rovig, and Roger Steininger. Second place was captured by Bill Bilyeu, Kyle Eklund, Lance Eklund, and Jack Taylor. The third place team consisted of Doug Hansen, Mark Reischman, Mike Braun, and David Williams. In the women's division, the first place team members were Opal Adams, Laura Ruud, Bev Baertsch, Marge Scherer, and Cami Prenn. Second place went to the team of Carol Oriel, Maureen Rovig, Allison Thomas, and LuAnne Steininger.

Other notable achievements were the longest drives by Andy Wallace and Judy Hall (one from each division), longest putt by Jimmy Lish and Jane Wheatley, and closest to the pin goes to Bob Felder (the women seemed to have trouble finding the green).

See you next year!

GREETINGS FROM DONNA BLOOM the new GSN Office Manager

I would like to take this opportunity to introduce myself as the new GSN Office Manager. Prior to working for GSN, I was employed at the Desert Research Institute, Water Resources Center for 13 years. I am also the Executive Director of the Nevada Water Resources Association (NWRA), and have been working with them for 4 years. I feel honored to be given the opportunity to work for the Geological Society of Nevada, who has an upstanding, excellent reputation. I'm looking forward to working with all of you, and assisting you with any GSN issues that I can. Please stop by the office if you're in the neighborhood. My office hours are Tuesday-Wednesday, 9:00 am to 3:00 pm, and Thursdays, 9:00 am to noon.

GSN ANNUAL PICNIC

Mark your calendars! The GSN annual picnic will be Saturday, October 7, 2000 at Bowers Mansion Park in Washoe Valley. The picnic will be held from 12:00 to 5:00 in the North Picnic area. Bring the whole family for a day of fun and games! What a great opportunity to have fun with your colleagues!

Please complete and return the sign up form by September 25. Hope to see you there!

12	th ANNUAL GSN FAMILY PICNIC
Name:	
Total # fam	ily members or guests in your party:
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WANTED

News and Rumor from the Bush, contributors of interesting, humorous, entertaining and newsworthy stories or comics, please contact Donna Bloom at 775/323-3500, or e-mail at gsn@mines.unr.edu

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GSN SYMPOSIUM 2000 REPORT

Opal Adams, GSN Symposium 2000 Chairperson

The Symposium 2000, Geology and Ore Deposits 2000: The Great Basin and Beyond, was a smashing success thanks to a dedicated volunteer organizing committee, generous sponsors, interesting speakers, and enthusiastic exhibitors. Approximately 1200 people attended the meeting with participants from many parts of the globe. Countries represented by



Kelly Cluer, technical program, and Monte Swan, author.

geoscientists included the United States, Canada, England, Wales, Mexico, Chili, Mongolia, China, Australia, Spain, Brazil, Argentina, Peru, South Africa, Thailand, Kazakhstan, New Zealand, and Czechoslovakia. The "Big Party" was attended by a large number of people who seemed to be having a good time but weren't able to consume all of the available food and drink. The social events received rave reviews and provided an excellent medium for networking and

catching up with old and new friends. One of the highlights of the Exhibit Hall was the beautiful mineral collections put together by yet another group of volunteers. Even John Ascuaga had positive comments to make about the meeting and the organization in general.

The Proceedings volumes and the CD are on schedule for a mid- to late-October delivery. Seventy-two papers were accepted for inclusion and cover the broad range of topics that were presented during the technical session of the meeting. The field trip guide books are available for each individual field trip as opposed to publishing a Compendium. Orders for any of the publications can be processed through the GSN office.

As co-chair to the meeting, I would like to extend my heartfelt thanks to my fellow committee members, all of the companies that supported their employees in this endeavor, and to all of the financial and event sponsors that really helped to make this meeting a success. Special thanks go to Laura Ruud and Raye Buckley for organizing, typesetting and making things happen.



Marty Dennis

GEOLOGICAL SOCIETY OF AMERICA NATIONAL MEETING

Rich Schweickert, General Chair, Summit 2000

One of the most important geoscience events of 2000 is coming to Reno in November, and GSN members are warmly invited.

The 2000 Geological Society of America Annual Meeting and Exposition will be in Reno, November 13-16, 2000. Summit 2000, our theme, acknowledges this meeting as the largest and most important gathering of earth scientists in North America, at the beginning of the new millennium and near the summit of the western Cordillera. This will be an opportunity to reflect on our past scientific progress and to look forward from the summit toward distant horizons. The meeting will have activities sponsored by 24 associated societies and 12 divisions. Over 6,000 geoscientists are expected, and a sparkling array of technical, educational, and social offerings will be presented. For great cutting-edge science and technology, field trips, educational and employment opportunities, and social events, this is a meeting not to be missed!

Geological Society of Nevada is co-hosting the meeting, together with the Department of Geological Sciences, UNR, and Desert Research Institute. Technical sessions between the 13th and 16th will include eight Pardee Keynote Symposia, over one hundred topical sessions, and numerous discipline sessions. On Sunday, November 12, the Society of Economic Geologists will hold its traditional full-day symposium. In addition, 24 field trips, including premeeting, concurrent, and postmeeting trips, have been proposed.

GSA will feature its employment service and will host a full complement of educational activities, including, but not limited to, thirteen short courses and workshops. Over 400 professional exhibitors are expected.

Field trip dates will be, November 9-12, 15, and 16-18, and will examine many outstanding Great Basin field sites between Reno, Las Vegas, Elko, and also key parts of the Sierra Nevada. Important topics include mineral deposits, tectonics, stratigraphy, Quaternary/Holocene environments, and Yucca Mountain.

For abstract submission, further information, or preregistration, go to: www.geosociety.org/meetings/2000.

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NEW PUBLICATIONS SYMPOSIUM 2000 FIELD TRIPS

The new field trip publications can be purchased as a set for \$300. The pre-publication price of the Proceedings volume can be purchased for \$100. Order now, because the price will go up once they are published. For more information, or to order, contact Donna Bloom at 775/323-3500.

- **00FT2** Structure, Volcanic Stratigraphy, & Ore Deposits of the Pah Rah Range, Washoe County, NV: Olinghouse Mine, Pyramid Mining District, Perry Canyon Caldera, & Pah Rah Range Oligocene-Miocene Volcanic Succession, 132 p. (2000) **\$25.00**
- **00FT3** Tilted Middle Tertiary Ash-Flow Calderas & Subjacent Granitic Plutons, Southern Stillwater Range, NV: Cross Sections of an Oligocene Igneous Center: Stillwater Caldera Complex, Southern Stillwater Range & Wonder Mining District, 101 p. (2000) **\$25.00**
- **00FT4** Eocene Magmatism & its Role in Generating Sediment-Hosted Gold Deposits of the Carlin Trend: Emigrant Pass Volcanic Field, Northern Carlin Trend (Beast, Genesis, & Betze-Post Deposits), Tuscarora Volcanic Field (Mt Blitzen Volcanic Complex, Tuscarora Epithermal Precious-Metal Deposit), 223 p. (2000) **\$35.00**
- **00FT5** Ore Deposits of the Battle Mtn Area, NV: Variations on a Theme in the Havallah & Antler Sequences: N Peak & Marigold Mines; Phoenix Project; Redline Deposit, 172 p. (2000) **\$35.00**
- 00FT6 Cortez to Eureka Gold Deposits: Ruby Hill/Archimedes Mine Area, Cortez Gold Mines, 206 p. (2000) **\$35.00**
- **00FT7** Giant Sedimentary Rock-Hosted Mineral Systems of the Carlin Trend: Gold Quarry & Betze/Post Deposit: Gold Quarry & Betze/Post Mines; Mike Deposit, 165 p. (2000) **\$45.00**
- 00FT8 Volcanic History, Structure, & Mineral Deposits of the N-C Northern Rift, 174 p. (2000) \$35.00
- 00FT9 Geology & Ore Deposits of the Getchell Region, Humboldt County, NV: Twin Creeks, Getchell, Pinson, & Preble Mines, 153 p. (2000)\$35.00
- **00FT10** Comparisons of Various Types of Ore Deposits in S-C NV: Rawhide, Tonopah Copper, & Round Mtn Mines; Three Hills Project; Tonopah & Goldfield Districts; Gemfield Deposit, 223 p. (2000) **\$35.00**
- **00FT11** Cenozoic Tectono-Magmatic Evolution of White Pine County, NV: Core Complexes, Eocene-Oligocene Volcanic Centers, Episodic Extension & Shortening, & Disseminated Gold Deposits; White Pine & Central Egan Ranges; Illipah Mine, Snake Range Metamorphic Core Complex, Robinson Mining District, 168 p. (2000) **\$35.00**

Memoriam

Mackay School of Mines and the W. M. Keck Museum have lost a priceless treasure with the untimely passing of Dr. Tom Lugaski on July 1, 2000. Tom was an unwavering advocate of hands-on Earth Science education and led hundreds of science teachers on field trips and science institutes, sparking them to pass on his enthusiasm for fossils, minerals and rocks to the children they teach. GSN members worked closely with him on judging the Western Nevada Regional Science Fair for the past several years. Many of us wish that we recorded just a fraction of the things he told us about Nevada's fossils, mining history, and Mackay memories. GSN extends its sympathies to Tom's family and share their loss.

GSN will contribute to the Tom Lugaski Memorial Fund for science fair awards.



- OROGENIC PROTEROZOIC GOLD -Partington (Ross Mining) and Williams (JCU, Townsville)
- OROGENIC PHANEROZOIC GOLD -Bierlein (Melbourne) and Crowe (Univ. of Georgia, Athens)
- OROGENIC GOLD—THE HYDROTHERMAL FLUIDS -Ridley (Sydney) and Diamond (Leoben)
- CARLIN GOLD -Hofstra (USGS, Denver) and Cline (UNLV, Las Vegas)
- EPITHERMAL GOLD
 - -Cooke (CODES, Tasmania) and Simmons (Geothermal Institute, New Zealand); Hedenquist (Consultant, Ottawa), Arribas and Gonzalez (Placer Dome)

- —Jensen and Barton (University of Arizona, Tucson)
- GOLD PORPHYRY (OXIDIZED) AND GOLD SKARNS -Sillitoe (Consultant, London); Meinert (Washington St. Univ., Pullman)
- INTRUSION-RELATED (REDUCED) GOLD -Thompson (Teck) and Newberry (University of Alaska)
- VHMS-SEDEX GOLD -Huston (AGSO, Canberra); Emsbo (USGS, Denver)
- WITWATERSRAND GOLD —Phillips and Law (Great Central Mines)
- TECTONIC-STRUCTURAL MODELS FOR GOLD -Kerrich (Univ. of Saskatchewan), Groves (UWA, Perth), Goldfarb (USGS, Denver) and Garwin (UWA, Perth)
- GOLD EXPLORATION TECHNOLOGY-SCIENCE INTERFACE

-McCuaig (Consultant) and Hronsky (WMC)

The presenters will provide both academic and industry points of view for most deposit styles in hour-long presentations, with discussions and review papers. Space and time for Poster Presentations have been scheduled during both meeting days. Students and young researchers are especially encouraged to present their work. Contact Louis Bucci at <lbcs/louis/geol.uwa.edu.au> for details. Papers from the course will be published as Volume 13 of the Reviews in Economic Geology series. Cost: US\$440-Members; US\$220-Certified Students; US\$550-Nonmembers. Registration fees include breakfast, lunch and breaks on both days, two nights of hotel accommodation (double occupancy), shuttle transportation between Cal-Neva and Reno, and Reviews Volume 13.

For further information on the Short Course, contact:

- **Steffen Hagemann**, Centre for Strategic Mineral Deposits, The University of Western Australia, Nedlands, WA 6907, Australia, Tel. +61.8.9380.1517 / Fax +61.8.9380.1178 / e-mail <shageman@geol.uwa.edu.au>,
- Phil Brown, Dept. of Geology and Geophysics, University of Wisconsin, 1215 W. Dayton, Madison, Wisconsin 53706, Tel. +1.608.262.5954 / Fax +1.608.262.0693 / e-mail <pbrown@geology.wisc.edu>.

For information on course registration and reservations, contact the SEG office at 7811 Shaffer Parkway, Littleton, Colorado 80127, Tel. +1.720.981.7882, Fax +1.720.981.7874, e-mail <seg@segweb.org> or website <www.segweb.org>. 500 Tel. +1.720.981.7874, e-mail <seg@segweb.org> or website </br>

GEOLOGICAL SOCIETY OF NEVADA



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UP-COMING EVENTS

Sept 8-10 Nat'l Association of Geoscience Teachers Conf, Geology & Tectonics of the Northern Sierra NV, 7 field trips planned at Blairsden, CA. CA State Univ, E Brooks, 530/862-0415, ebrooks@csuhayward.edu

Sept 10-14 WGA 51st Annual Field Conf at Casper, WY. Classical WY Geology in the New Millennium. 307/268-8466, akfgeol@caspers.net

Sept 20-22 AHS Symposium 2000, Environmental Technology for the 21st Century at Phoenix, AZ. Ahs2000@urscorp.com

Sept 30-Oct 1 GSN Fall Field Trip, Northern Mother Lode, Sixteen to 1 Mile. 775/323-3500, gsn@mines.unr.edu

Oct 6 Well Construction Workshop, Peppermill Hotel & Casino, Reno, NV. Sponsored by the Nevada Water Resources Association & the American Water Works Association. 775/626-6389, donna30@sprynet.com

Oct 7 GSN Annual Picnic. 775/323-3500, gsn@mines.unr.edu

Oct 9-12 MINExpo Int'l 2000, Las Vegas, NV. www.minexpo.com

Oct 20 GSN Membership Meeting in Reno, NV. 775/323-3500, gsn@mines.unr.edu

Nov 6-8 Applied Geologic Remote Sensing Integrated Solutions for Real World Problems in Las Vegas, NV. 800/582-2228, www.alexispark.com/roomres.html

Nov 7 Denver Prospect Fair & TechnoFest, Colorado Conv Center, Denver, CO. 303/446-2253, Dapl2253@aol.com

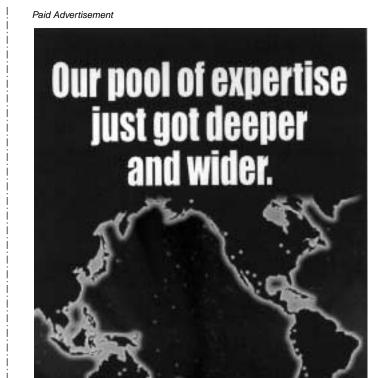
Nov 12-15 GSA Annual Meeting, Reno/Sparks Conv Center, Reno, NV. www.geosociety.org/meetings/2000

Dec 3-7 NWMA Annual Meeting & Expo in Spokane, WA. H Hoeft, 509/624-1158, www.nwma.org

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Environmental Coordinator	58,400	62,600
Purchasing Agent	52,200	47,900

(Source: U.S. Metal & Industrial Mineral Mine Salaries Wages & Benefits, 2000 Survey Results, Western Mine Engineering, Inc., Spokane, WA)



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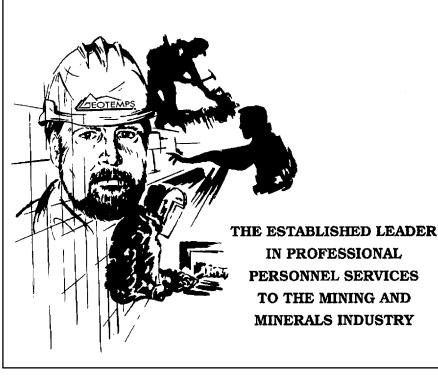


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