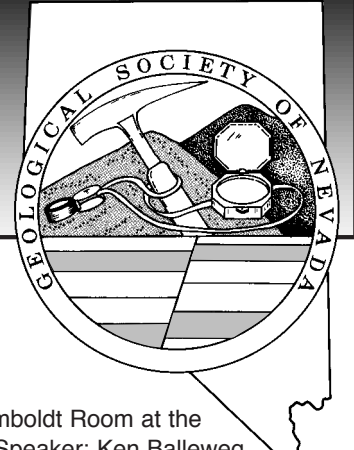


GSN NEWSLETTER



December 2001, Vol. 15, No. 10

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CALENDAR OF EVENTS

Dec 5

Wednesday

WINNEMUCCA CHAPTER MEETING: Humboldt Room at the Red Lion Hotel/Casino, Winnemucca, NV. Speaker: Ken Balleweg, Placer Dome Exploration, Cortez Gold Mines, title: "Geologic Overview of the Mulatos Deposit and the Mulatos Gold District, Sonora, Mexico." Bar opens at 6:45 pm, meeting at 7 pm. Contact Sheila Bunch for information, sbunch@lambdacom.com, 775/623-0202.

Dec 19

WEDNESDAY

GSN CHRISTMAS DINNER MEETING AND 2ND ANNUAL FOUNDATION ROCK RAFFLE: Reno Elks Lodge, Reno, NV. Speaker: Jeff Doebrich, U.S. Geological Survey, Reno, NV. Topic: "A Journey Through Saudi Arabia." Social-6 pm, dinner-7 pm (**\$20**), talk-8 pm. Contact Laura Ruud, 775/323-3500, gsn@mines.unr.edu.

Dec 20

Thursday

ELKO CHAPTER MEETING: High Desert Inn, Elko, NV. Speaker and topic to be announced. Refreshments at 6:30 pm. Contact Leslie Creel at 775/468-4400 for information.

SOUTHERN NEVADA CHAPTER will not have a meeting in December due to the Christmas Holiday. They'll be back in January!

GSN Newsletter is published monthly except June and July

Geological Society of Nevada, PO Box 12021, Reno, NV 89510-2021 USA, 775/323-3500

GSN SCHOLARSHIPS DISBURSED

The recipients of the **Geological Society of Nevada Endowed Scholarship** were announced November 1, 2001 at the Mackay School of Mines annual scholarship luncheon. The 2001-2002 recipients of the GSN scholarship are **Melanie Berg**, a sophomore in Geology with a perfect 4.0 GPA (**\$1342.00**) and **Jess DeBusk**, a senior transfer student in Geology with a 3.50 GPA (**\$1000.00**). Each student wrote a very appreciative letter to the GSN membership. The funds that GSN provides to these students can determine whether that student can afford to go to school full-time or not.

GSN donates \$2000 each year to the GSN Endowed Scholarship Fund. The GSN scholarship is just a portion of the \$279,239 that was awarded to undergraduates and graduates at Mackay School of Mines this year. Mackay attracted a total of 75 new undergraduates and has a record number of student Full-Time Equivalents this year (245) up from the low of 190 in 1997. The GSN enjoys a good working relationship with the Mackay School of Mines and are proud to support students working on their education in Geology.

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DONATIONS STILL NEEDED FOR GSN FOUNDATION ROCK RAFFLE

The Geological Society of Nevada Foundation's 2nd Annual "Rock Raffle" fundraiser is on schedule for the GSN annual Christmas meeting, December 19th, 2001. We are still seeking donations of any items suitable for raffle: attractive rocks, fossils, or mineral samples, wine or other spirits, logo items, geological equipment or publications, commemorative coins, books, cakes, gift baskets, or any geology or mining-related items will be gratefully accepted.

The raffle proceeds will be applied to the GSN Foundation's unrestricted fund to benefit GSN's educational projects which include grants to Nevada K-12 classes for transportation on earth science related field trips, scholarships to UNR and UNLV geology students, grants to the UNR DeLaMare Library, and grants for geologic mapping in Nevada.

Please send donated items to DD LaPointe at the following address to arrive before Dec. 17th, or drop them off at NBMG, or call to arrange pick-up of donated items if you are in the Reno-Sparks-Carson City area. Please let me know if you would like a receipt for the value of your tax-deductible donated items, and I'll send you one.

Thank you! D.D. LaPointe, GSN Educational Committee Co-Chair and GSN Foundation Trustee, Nevada Bureau of Mines and Geology/MS178, Room 314, Scrugham Engineering/Mines Building, University of Nevada, Reno, 784-6691, ext. 134.

GSN EARTH SCIENCE FIELD TRIP GRANTS GIVEN OUT

The GSN Foundation has once again made it possible for schoolchildren in Kindergarten through 12th Grades, all over the state of Nevada, to embark on Earth Science Field Trips. Over 2,000 students are being taken on 33 field trips this school year, where they are gaining hands-on learning experiences in the earth sciences. These trips include destinations all over the state from the Reno and Fallon areas to Great Basin National Park and down to Red Rock Canyon and the Valley of Fire, with many points in between. Some students are touring mines such as Coeur Rochester's silver mine and Kennecott's Denton Rawhide Mine, while others are hunting stickleback fish fossils in Eagle Picher's diatomite pit. They will learn about sedimentary rocks, earthquake faulting, volcanics, erosion, glaciation, etc. A total of \$8,022 was requested and of that, the Foundation funded \$5,000. At-risk schools were funded at 75% and others were funded at 50% or more. Thanks to your generous donations to the GSN Foundation, we have been able to continue this program for another year.

GSN FALL FIELD TRIP 2001 PUBLICATION AVAILABLE

The Field Trip Guidebook (Special Publication #34) entitled "Magmatism and Gold Deposits in North-Central Nevada-Variations on a Theme" is now available for sale at the GSN office for the low price of \$35. Dave Emmons and the Echo Bay staff lent a big hand in preparing the field trip guide book, which will serve as an excellent source of data for McCoy/Cove, particularly as the mining there has recently terminated and not much in the way of additional material will be forthcoming. Bob Thomas, GSN Vice President, served as editor and field trip organizer. Contact the GSN office today to place your order! 775/323-3500 or gsn@mines.unr.edu.

The GSN Foundation wishes to thank the following new Founding Donors for their support:

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Michael Lindholm
Camille Prens
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If you would still like to be one of the forever Founding Donors of the GSN Foundation we must receive your donation by December 31, 2001.

Visit our web site at:
www.gsnv.org

GSN December 19, 2001 Membership Meeting

Date: Wednesday, December 19, 2001
Time: Social-6:00, Dinner-7:00, Meeting-8:00
Cost: \$20.00 (dinner)
Reservations: 775/323-3500; fax 323-3599 or e-mail:
gsn@mines.unr.edu
Deadline: Reserve by noon Monday, December 17

Location: Elks Lodge, 597 Kumle Lane, Reno, Nevada
Directions: Across (W) from the Reno-Sparks Convention Center (S Virginia St), just behind the Les Schwab Tire Center
Speakers/topic: Jeff L. Doebrich, U.S. Geological Survey, Reno, NV. See abstract below.

A JOURNEY THROUGH ARABIA

Jeff L. Doebrich, U.S. Geological Survey, Reno, Nevada

For most, the mention of Saudi Arabia conjures up images of oil, sand, and camels (and perhaps other things of late). In fact, Saudi Arabia is a land of varied, geology, landscapes, and ancient history. The geology of Saudi Arabia is composed of (1) the Neoproterozoic Arabian shield exposed in the western part of the country, (2) Phanerozoic sedimentary rocks of the Arabian platform in the east, (3) Cenozoic volcanic fields related to Red Sea rifting covering portions of Arabian shield and platform rocks in the west, and (4) Cenozoic sedimentary rocks along the Red Sea margin (fig. 1). Significant non-fuel mineral resources of Saudi Arabia include actively producing gold deposits in the Arabian shield, world-class phosphate resources in the Arabian platform rocks of the northern border regions, and sediment-hosted base-metal potential in both Arabian platform rocks and Cenozoic Red Sea margin sequences.

While the country is home to some of the harshest and largest sand-filled deserts in the world, it is also home to some of the most rugged and spectacular mountain terrane, rising to elevations of 10,000 feet, where baboons and hyena live today amongst the Juniper. This elevated region of the southwestern Arabian shield is bounded on the west by the Red Sea escarpment, a feature displaying 1 to 2 km of relief, and continuing into Yemen (fig. 1).

Continued on page 4.

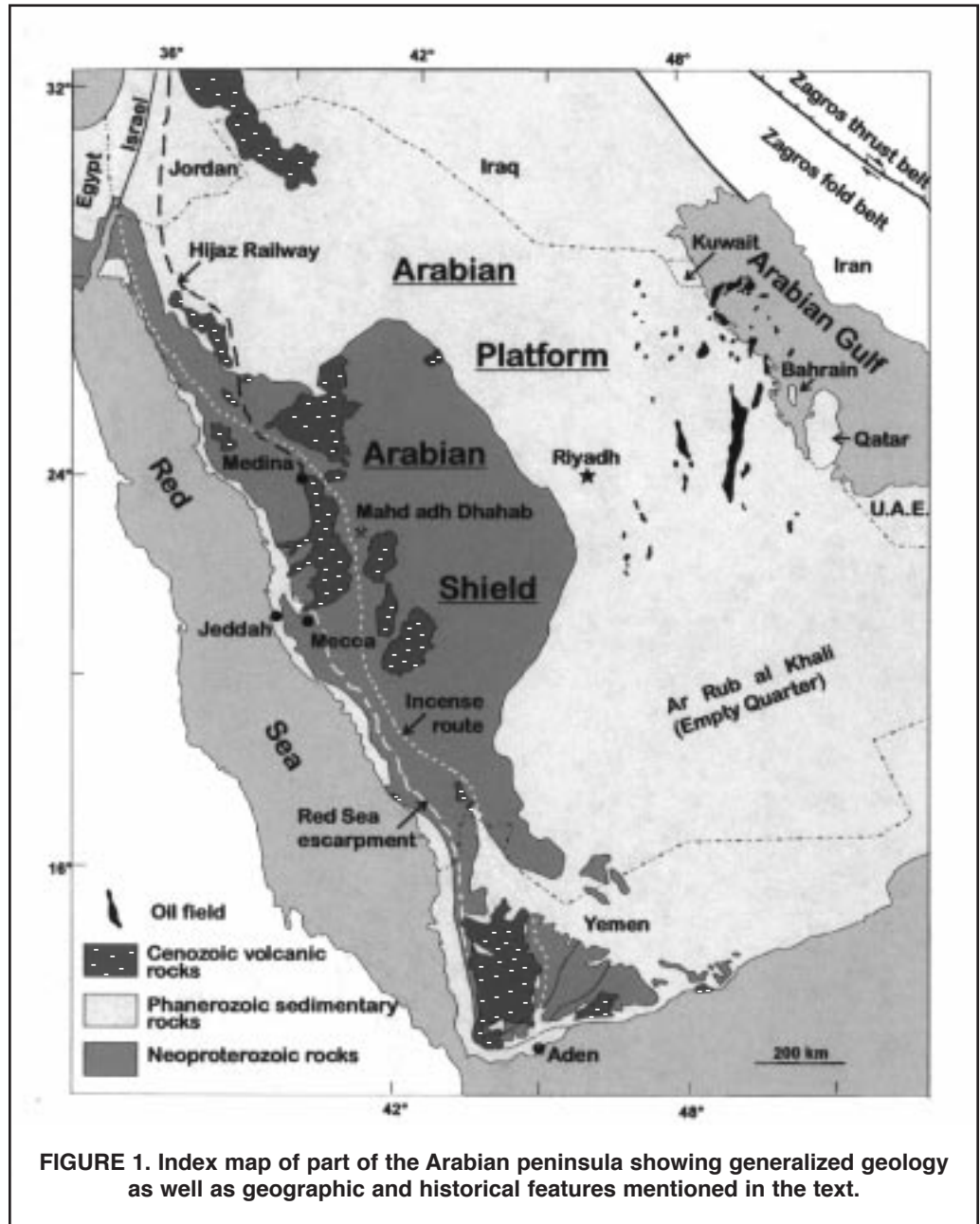


FIGURE 1. Index map of part of the Arabian peninsula showing generalized geology as well as geographic and historical features mentioned in the text.

ABSTRACT (continued from page 3)

Dissected and variably eroded flat-lying sedimentary sequences of the Arabian platform locally give rise to landscapes that rival those in the national parks of the western U.S. Cenozoic volcanic fields provide moonscapes typical of basaltic lava fields and remain active today with low-temperature geothermal resources and locally continuous microseismicity. The holy city of Medina was almost destroyed by the most recent volcanic activity in 1254 A.D. The Red Sea coastal plain is a relatively flat sand and sabkha covered region along most of the Red Sea margin, which separates rocks of the Arabian shield from some of the most spectacular coral reefs in the world.

The position of the Arabian peninsula at the cross roads of Asia, Africa, and Europe has produced a long history of trade, mining, and conquest, the remnants of which can still be seen today. Nabatean tombs and dwellings, petroglyphs illustrating an extinct world, ancient gold and copper mines, portions of the ancient incense route from Yemen to the Mediterranean, Ottoman forts, and the remains of T.E Lawrence's campaigns along the Hijaz Railway (fig. 1), all document a rich and varied history spanning more than 3000 years.

GSN FOUNDATION FINANCIAL REPORT

Enclosed for your information is the latest financial report of the GSN Foundation. The Foundation's goal is to create an endowed fund that will eventually be large enough to fund the GSN's philanthropic causes. Currently the GSN provides scholarships to the University of Nevada, Reno's Mackay School of Mines and the University of Nevada, Las Vegas' Geoscience Department. In addition, \$5000 is donated each year for K-12 Earth Science Field Trip Grants all over the state of Nevada. In the future, the Foundation hopes to be able to help fund the Quadrangle Mapping Grant program and other worthy causes. If you have any questions regarding the Foundation, please contact Joseph Kizis, Jr. at 775/746-5055 or email: joekizis@home.com.

	2000-2001	Year to Date 2001-2002	Cash in Accounts
CONTRIBUTIONS			
Endowment Fund	\$9,000.00	\$1,250.00	\$10,250.00
NBMG Mapping Grants	100.00	200.00	300.00
Operating Expenses	1,000.00	0.00	854.00
School Field Trips	430.00	155.00	585.00
Unrestricted Funds			-
Sarah Andrews Book Sales	1,511.12	926.65	
Christmas Fundraiser	1,634.00		
Donations	5,077.00	2,123.00	5571.77
	\$18,752.12	\$4,654.65	\$17,560.77
EXPENSES			
Office Costs	136.00	10.00	
Donations			
School Field Trips	5,200.00	TBD	
UNLV Scholarship	500.00		
	\$5,836.00	\$10.00	
PROFIT	\$12,916.12	\$4,644.65	

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AIPG 12TH ANNUAL ROUNDUP DINNER

Please join the AIPG, Nevada Section, as they hold their 12th annual Exploration Roundup Dinner at the Eldorado Hotel and Casino. Confirmed speakers are from the following companies:

Meridian Rich Larson	Barrick Ed Cope	Echo Bay Ralph Bullis	Placer Dome Greg Cox
Agnico-Eagle Mark Abrams	Cameco Al Moran	Newmont Ken Paul	Ivanhoe Mines Ed Flood
Kennecott Geoff Ballantyne	Cordex Andy Wallace	Kinross Bob Schafer	AngloGold Don Birak

Date: Tuesday, December 18, 2001.

Time: 6:15 pm, cocktails hosted by **Eklund Drilling Co.**; 7:00 pm dinner; 8:00 pm program.

Place: Eldorado Hotel and Casino (corner, 3rd & Sierra St, Reno, NV, parking entrance, Sierra St, free with validation).

Cost: \$35 AIPG, GSN Members and Spouses; \$40 others.

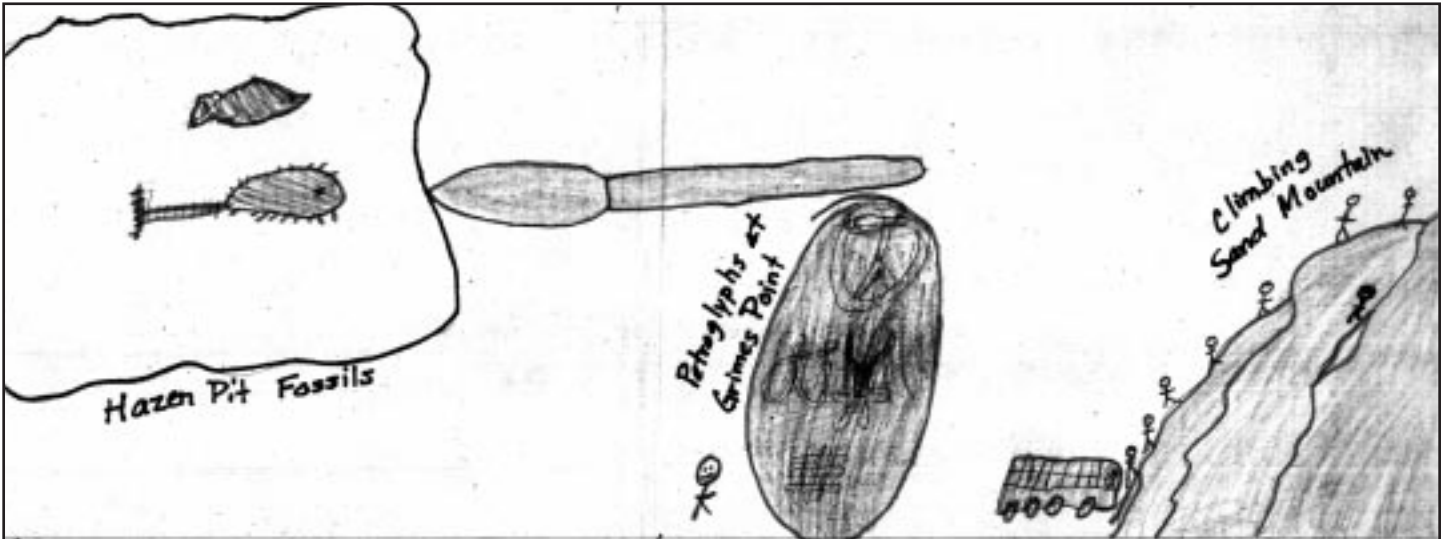
Door prizes courtesy of **Mark Stock**, Global Hydrogeologic Services, Inc.

Reservations are required. Contact Kel Buchanan at 786-4515, fax 786-4324 or summitcrk@aol.com.

ROUND MOUNTAIN MINE DONATES GOLD SPECIMENS

Round Mountain Gold Mine which is owned by Homestake Mining Company (50%) and Echo Bay Mines (50%) will be generously donating 2 – 3 beautiful gold specimens for the 2nd Annual GSN Foundation's Rock Raffle. The specimens will be auctioned off at the GSN Christmas Dinner meeting on Wednesday, December 19th. Be prepared for this rare opportunity by bringing your checkbook or credit card to the meeting. All proceeds from the Auction will go into the GSN Foundation's Endowment Fund which we hope will continue to grow over the years. If you would like to preview a sampling of specimens that are coming out of the Round Mountain Gold Mine, please visit www.geoprime.com.

There will also be many other donated items that you will have a chance to win by purchasing raffle tickets at the dinner. Several members will be donating some very nice mineral specimens and gemstones. Also, Ed MacKevett is donating a specimen of Kennecott hi-grade copper ore from Alaska that is sawn on both sides and weighs about 3 lbs. Consider bringing an extra \$20 for those \$1 chances to WIN!



Dear GSN,
 Thank you for giving us money to go on fieldtrips. It was really fun digging up fossils. I got 20 fossils.

It was really fun at Grimes Point and Sand Mt. At Grimes Point I found like 20 petroglyphs. At Sand Mt. I climbed up three times to the top.

Sincerely,
 Amanda Tye

West End Elementary, Fallon, NV

Merry Christmas
 to all our GSN members and friends



Laura Ruud, GSN Office Manager and Raye Buckley, GSN Typographer

UP-COMING EVENTS

Dec 3-7 – Northwest Mining Association's 107th Annual Meeting, "GeoDestiny-Resources for the Future", Double tree Hotel, City Center, Spokane, WA. 509/624-1158, www.nwma.org. Stop by the GSN Booth #10!

Dec 5 Wednesday – WINNEMUCCA CHAPTER MEETING: Winnemucca, NV. Ken Balleweg, Placer Dome Exploration, Cortez Gold Mines, Geologic Overview of the Mulatos Deposit and the Mulatos Gold District, Sonora, Mexico. Sheila Bunch, sbunch@lambdacom.com, 775/623-0202.

Dec 15 – SME Christmas Party, Harrah's Prospector Club, Reno, NV. Begins at 6 pm. Marcie Wood, 775/331-2375.

Dec 18 – AIPG Nevada Section, 12th Annual Roundup Dinner, Eldorado Hotel and Casino, Reno, NV. Reservations required. Contact Kel Buchanan, 775/786-4515, summitcrk@aol.com.

Dec 19, Wednesday – GSN CHRISTMAS DINNER MEETING and 2ND ANNUAL FOUNDATION ROCK RAFFLE: Reno Elks Lodge, Reno, NV. Jeff Doebrich, USGS, Reno, NV. Saudi Arabia. Social-6 pm, dinner-7 pm (**\$20**), talk-8 pm. Laura Ruud, 775/323-3500, gsn@mines.unr.edu.

Dec 20, Thursday – ELKO CHAPTER MEETING: High Desert Inn, Elko, NV. Speaker and topic to be announced. Refreshments at 6:30 pm. Contact Keith Bettles, kbettles@bgmi.com.

SOUTHERN NEVADA CHAPTER MEETING: Cancelled in December due to the Holiday.

2002

Jan 11 – Geothermal Workshop, Great Basin Center for Geothermal Energy, Jot Travis Student Union, UNR, Reno, NV. For more info contact Terri Garside at 775/784-6691, ext 126 or www.nbmj.unr.edu/geothermal.

Jan 22-25 – Cordilleran Roundup – Hotel Vancouver, Vancouver B.C. Contact B.C. and Yukon Chamber of Mines, 604/681-5328 or visit the website: www.chamberofmines.bc.ca.

Feb 25-27 – SME Annual Meeting, Phoenix, AZ. Contact SME 303/973-9550 or 800/763-3132.

April 14-16 – SEG Annual Conv, Global Exploration 2002: Integrated Methods for Discovery; Denver, CO. www.seg2002.org.

GSN HISTORY 101

Funny things happen on GSN field trips. The most recent event was yours truly being asked to write a history of the Society. Now I need your help. I am looking for any information about GSN that is pre-1990. Any newsletters, personal recollections, or anything else (except guidebooks and publications) would be most useful. I would even be willing to buy lunch in exchange for good memories, on a limited basis. Please send your cards and letters, or give me a call.

Thanks, Roger Steininger.

"WHAT A PIT" CONTEST IN FULL SWING

The "What A Pit" website contest is in full swing this month, with the first contest happening now! Take a minute to check out the historical photo on the GSN web page at www.gsnv.org. If you can identify the "arm-waving old timer" then you will be eligible for a fabulous prize (a GSN Hat valued at \$14!).

Submissions can be sent to whatapit@gsnv.org or contact Mario Desilets at desilets@unr.edu. You must be a current GSN member to win.



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