



GEOLOGICAL SOCIETY OF NEVADA NEWSLETTER

Geological Society of Nevada, 2175 Raggio Parkway, Room 107, Reno, NV 89512
(775) 323-3500 - Hours Tuesday -- Friday, 9 a.m. to 4 p.m. Monday by appointment.
Website: www.gsnv.org • E-mail: gsn@gsnv.org



April 2020, Vol. 36, No. 4

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dpbryan@sbcglobal.net

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Class B, 2019-2022
David Caldwell
Greg French

Class C, 2017-2020
David Shaddrick
Camille Prens

Published monthly except June and July

CALENDAR OF GSN EVENTS

Due to the Coronavirus pandemic, we are sad to tell you that the Geological Society of Nevada will not be holding any meetings until further notice. We will keep the Members informed if there are changes in the coming month.

April 2, 2020
THURSDAY

SO. NEVADA CHAPTER MEETING (1ST THURSDAYS)

The Southern Nevada Chapter meeting will be held at the Las Vegas Natural History Museum, 900 N. Las Vegas Blvd. Contact President, Joshua Bonde for more information: paleo@lvnhm.org.

April 8, 2020
WEDNESDAY

WINNEMUCCA CHAPTER MEETING (2ND WEDNESDAYS)

The meeting will be held at the Martin Hotel, 94 W. Railroad St. Drinks at 6:00 pm, Appetizers at 6:30 pm, Talk at 7:00 pm. Please see page 6 for a message from your Chapter President, Robbie Anderson at: Robbie.agau@gmail.com.

April 16, 2020
THURSDAY

ELKO CHAPTER MEETING (3RD THURSDAYS)

The monthly meeting will be held at the Western Folklife Center, 501 Railroad St. Drinks & Appetizers at 6:00 pm, Talk at 7:00 pm. **Food and Drinks Sponsored by: BOART LONGYEAR!** Please see page 7 for a message from your Chapter President, Diane Cheung-Harris. dianehcheung@gmail.com.

April 17, 2020
FRIDAY

GSN MEMBERSHIP MEETING (3RD FRIDAYS)

The GSN's monthly meeting will be held at Taps & Tanks, 1155 So. Rock Blvd., Reno, NV. Drinks at 6:00 pm; Dinner at 6:30 pm; Talk at 7:30 pm.

Thank you to our Reno drink sponsors for 2019-2020!

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FROM THE PRESIDENT
Dennis Bryan, GSN President 2019-2020
APRIL 2020

Last month when I was preparing my gibberish for inclusion in the GSN Newsletter the coronavirus pandemic was off my radar. Apparently, it was off most people's radar, except for some of those knowledgeable health care folks. How events in four short weeks can impact our lives! We know not where this is going but, wherever, we have no choice but to follow.

As you know from emails, GSN has postponed for a year the much-anticipated Symposium that was going to be held in May. See details elsewhere in this newsletter. The March member meeting was cancelled, and the April meeting has been as well. As for possible events this summer, keep checking your email. I would also like to remind you that GSN is still functioning, but remotely. Laura is ensconced securely at home with her computer and has hardly missed a beat in taking care of GSN business. Likewise, the officers, board and committees of GSN continue their business by email, text, phone or conference call. I cannot express my admiration enough for Laura and all the dedicated volunteers within GSN who make this organization something to be proud of.

Most of the experts (as you know, an expert is anyone from out-of-town) expect this coronavirus pandemic to be short-lived; a few more weeks to a few months. How long this thing lasts may have a profound effect on our future, not just from a health perspective (I hope you and your loved ones stay healthy), but also economically. How long can you go without a source of income and do you have a backup plan? Oh, and have you checked your investment portfolio lately?

The pandemic itself is certainly an unknown commodity and no one can say with much certainty how long it may last. A few years ago, I read *The Great Influenza*, a 2004 bestseller by John Berry telling the story of the World's most lethal influenza virus of 1918. Well, I dug it out of the bookcase and reviewed some of the salient features. In a span of a few months it killed as many as 100 million people worldwide, 650,000 in the U.S. (population at the time about 110 million). It happened during the height of the First World War. It was sometimes chaos as it spread rapidly through the army and then into the civilian population. Young adults seemed to bear the brunt of the outbreaks. Initially, it was not contained. The war effort took priority and only after thousands of deaths did local governments start to address the issue. In the end, the way to best fight the disease was to distance yourself from others. Some communities that took drastic measures by prohibiting access to any outsiders even survived with no cases of the virus. Others, who didn't limit access, such as a few big cities, saw up to several thousand deaths per day at the height of the pandemic. But it did finally end and rather quickly. Hopefully both the present-day medical community and our government leaders, this time around, are much smarter and better able to attack this thing head on. And God bless those health care providers and essential government and private employees who keep necessary services functioning. They are putting their health on the line to serve the rest of us.

You may need to address your financial institution. For those who are employed by business or various government agencies hopefully you'll not feel the financial pain if the shutdown is short and your business is easily able to start off where it left off. For those in the sometimes-risky exploration/mining community, especially those consultants and prospectors who chase financing, it may be a harder challenge, especially if investment is negatively impacted by the shutdown. Will investment money flow back into the exploration/mining sector in a timely fashion? How about if you have mining claims? Will you be able to pay the maintenance fees? Is it possible the BLM could delay the payment of those fees, just like the IRS has done for filing taxes?

Anyway, lots of things to ponder over the next few weeks. Pray for a speedy end to this evolving disaster. Maybe reach out to others who may be more vulnerable and who may need assistance, with groceries, medications, etc.

And see you at the next GSN get together... whenever that might be. Stay safe and stay home if possible, and if not, remember to keep your distance. Oh, and wash those hands!

Dennis

P.S. It is time to vote for next year's Executive Committee Officers and Class C Board of Directors. See pg. 11!

***The G.S.N. wishes to thank
GEOTEMPS INC. who would've
sponsored our April meeting had it
not been cancelled! Thanks to
Lance and all the staff there!***



GSN APRIL 17th MEMBERSHIP in RENO MEETING CANCELLED

The GSN Student Poster Competition cancelled
It is doubtful that we'll be able to reschedule this for the students this year as the campus is closed.

When: Friday, April 17, 2020

Where: Taps & Tanks, Reno

Who: Any Undergrad or Grad Student who has a Geoscience poster

CASH PRIZES AWARDED TO TOP 3 WINNERS!!

Please send abstract/title to Steve Weiss to enter: siraweiss@outlook.com

GSN 2020 SYMPOSIUM POSTPONED UNTIL MAY 2021

GSN 2020 Symposium News Flash!!! Preparations for 2021 In-progress.

Since rescheduling the GSN 2020 Symposium to May 2021, the planning committee has been developing procedures for registrants, participants in the technical program, and exhibitors to follow in the period of transition. Please see the following announcements posted on the website (gsnsymposium.org):

Registrants – instructions for those wishing to maintain their registration and those wishing to cancel their registration appear in an announcement posted on the “Register” page on the website: www.gsnsymposium.org/refund-request/. Please apply for refunds by May 31, 2020.

Speakers and Poster Presenters – instructions appear on the “Technical Session” page: www.gsnsymposium.org/technical sessions/.

Exhibitors – instructions appear on the “Exhibitors” page: www.gsnsymposium.org/exhibitors/. Refunds available. Please apply by May 31, 2020.

Proceedings — the GSN 2020 Symposium proceedings are on track to be published in late May, 2020. After May 31st, active registrants of the full technical program will receive the proceedings on a USB drive and, if previously ordered, on hard copy. Also, the proceedings will be available for purchase as hard copy and USB drive. At present, plans call for publishing an updated proceedings in 2021 featuring revised papers and new submissions. The 2021 proceedings would be released on USB drive.

Thank you for your support and ongoing interest in the GSN 2020 Symposium.
We look forward to seeing you in 2021.

Eric M Struhsacker

GSN 2020 Symposium Planning Committee Co-Chair



VISION FOR DISCOVERY
GSN SYMPOSIUM 2020

GSN 2020 SYMPOSIUM REFUND POLICY AND MORE INFORMATION!

The 2020 GSN Symposium Planning Committee understands the change of dates for the Symposium to May 2021 may require some who have already registered to cancel. We have established the process to refund registration for anyone who wishes to cancel for any reason – a full refund. This process will allow us to maintain an accurate database of active registrants when we reopen registration for Symposium 2021.

At this time all refunds requested will be a **full refund** of all events and activities for which you registered: technical program, field trips, short courses, luncheons, daily passes, exhibits only passes, Landshark Lounge, guest passes AND publications. They will be refunded in the same manner you paid, either by credit card through PayPal or by check. If you do not want a refund at this time, you don't need to do anything; we will carry your registration forward, as is, to next year.

Refunds will be initiated by you through the GSN Symposium website (gsnsymposium.org), using the CANCEL option. If someone other than you paid for your registration by credit card, please provide the name on the card. **The deadline for cancellation is May 31, 2020.**

If needed, you can request a listing of what you have registered and paid for by emailing Cami Prenz at camip@2020gsnsymposium.com. Cheri Reimann can be contacted with questions about this policy and the publications. Phone: 775-433-8758; Email: cheri.reimann@2020gsnsymposium.com.

While we do not expect many changes to the program, field trips, short courses, or luncheon speakers, it is possible there will be some. If you wish to cancel or change any of those activities, but do not want to cancel your entire registration, you will be able to make those changes starting January 4, 2021. **General registration will not reopen until January 18, 2021**, giving you the opportunity to make your changes before others begin to register.

The publication of the Proceedings is continuing on schedule with release of the 2020 publication, printed and on USB flash drive, expected in early June 2020. All technical program registrants on record as of May 31, 2020 will receive the 2020 publication on USB flash drive as soon as it is released. If you have cancelled your registration, and therefore your publications, you can order the publication through the website starting June 1, 2020 for \$100; this will also entitle you to receive the 2021 volume on USB flash drive when it becomes available next year. Both 2020 and 2021 volumes on USB flash drive are provided with each technical program registration.

All exhibitors will be contacted by Mary Stollenwerk and Tony Gesualdo for any refund requests.

Thank you for your patience as we work through the changes made necessary by these extraordinary times we're experiencing.

A few dates to keep in mind:

May 31, 2020 – all requests for refunds by this date. These are total refunds for all activities and events.

June 1, 2020 – website opens for ordering the 2020 publication only.

Jan. 4, 2021 – website opens for changes to registrations not cancelled; field trips, short courses, etc.

Jan. 18, 2021 – website opens for new registrations for GSN Symposium 2021.

“FACES OF GSN”

Jim Helgeson, Reno, NV



Jim's Story

Hello GSN, I've been working in the mining industry for about 29 years, I have worked for big companies, small companies and pretty much everything in between.

I'm originally from Nebraska and after graduating High School I enlisted in the USAF, where I was trained as a Korean linguist. While enlisted, I was stationed in California, Texas, South Korea and Maryland. After that 4 year stint, I enrolled at the University of Nebraska Lincoln. Having a great interest in space science, I had originally considered an astronomy major, until I realized it was a physics major, and I then switched to geology. I continue to follow NASA and other space agency's activities with great interest.

Upon completion of my Bachelors, I received a Teaching Assistant offer from Oregon State University, and I packed up and headed west. My MS thesis there involved mapping the structure and stratigraphy of the Mountain Boy Range, which is directly west of the Eureka mining district in Nevada. This was around the time of the Archimedes discovery, not too far from my mapping area, although I don't recall seeing any drill rigs out there at the time. While at OSU, I interviewed for a summer job, and got a chance to work at the Greens Creek Mine in southeast Alaska in 1990. Once I saw the beauty of the place, and what they were doing there, I knew metals exploration was for me! During the early to mid 90's, I spent time at the Kensington gold mine, and Vinasale Mt., and had a summer of helicopter recon in the Big Delta Quad, all in Alaska.

As some, or many of you recall, the late 90's, early 2000's were a time of very depressed (sub 300\$) gold prices, and things were slow. I was fortunate to work at the Ken Snyder Mine near Midas, Nevada, for about a year during the early underground development stage, during which time I had the opportunity to log, and sample electrum-laced quartz veining on a daily basis. A contract stint followed in southern Argentina for Yamana, in which we also explored for, and found, very high-grade epithermal, gold-silver veins.

(continued on page 5)

The early 2000's were a bit slow, and I got involved in the formation of Taranis Resources, a junior exploration company incorporated in Canada. Taranis had two main projects, the Thor VMS project in British Columbia, Canada and the Nakkenavarra copper-gold project in Finland. I bounced back and forth between those projects for a number of years until the Great Recession struck, making the Finland project non-financeable. Thor is now the remaining project in Taranis, and I continue as a Director of the company.



Thor project, B.C.

Post Great Recession times have brought rewarding work with Cordex, Silver Range Resources, Loneer, and McEwen Mining, in which I worked on the Eastside Project near Tonopah, NV, prospects in Nevada and Canada, the Rhyolite Ridge lithium-boron project outside of Tonopah, NV, and exploration in the Gold Bar Mine area, located near Eureka, NV, respectively. I am currently engaged in researching and promoting gold deposit types which I believe have been overlooked and undervalued in Nevada.

Which brings us to current times, and while writing this, I received a call about a job, so it is time to bust out the rock hammer and wrap this up.....

In conclusion, working and traveling in the metals exploration industry has been a fascinating experience, there is nothing else quite like it!

Good luck to everyone this year!

Winnemucca GSN Chapter 2019-2020

Thanks to our Speakers,
Membership, Volunteers...

A special thanks to John,
Lori and all the staff at
the **Martin Hotel**...

Volunteer

Call for officers
2020-2021

Contact
Robbie.agau@gmail.com



...and thanks to our 2019-2020 Sponsors: IDS, Layne, Granite, IMDEX, AMC, Reflex, NGM, Envirotech Drilling, Baroid, Jentech...and those who wanted and did not have the opportunity. You know who you are... Just Refiners and CGS Mule ;)

GSN SOUTHERN NEVADA CHAPTER MEETING

APRIL AND MAY MEETINGS CANCELLED!

Location: Las Vegas Natural History Museum, 900 Las Vegas Blvd. North

Please contact Southern Nevada Chapter President, Joshua Bonde at: paleo@lvnhm.org for more information.

GSN PWA ADVERTISER INFO FOR 2021

<https://www.gsnsymposium.org/advertisers/>

The Symposium will publish the Program with Abstracts that every participant will receive at the May 2021 Symposium. This will have all convention information as well as abstracts for all talks, papers, and posters.

Please consider advertising with us! Contact Holly McLachlan at advertising@2020GSNSymposium.com with questions or if you would like to receive a past example of a Program with Abstracts.

Business Card Ad—\$75; Quarter Page Ad \$150

Half Page Ad (horizontal) - \$300; Full Page Ad—\$600

GSN ELKO CHAPTER NEWS

Due to the rapidly evolving coronavirus (COVID-19) situation, all in-person Elko GSN events through the end of May 2020 are cancelled or will be postponed to a later date. If there is an online format opportunity, we will keep you informed or check the Geological Society of Nevada - Elko Chapter Facebook website on a regular basis for any such online event opportunities or updates. As we have during other challenging times, we will persevere through this one together. Take care and stay healthy.



We would like to thank Western Folklife Center for hosting our meetings, we're lucky to share our stories amidst a historic landmark. A special thank you goes out to Teddi Baer and her tireless efforts and service to make each and every meeting a truly memorable experience for our GSN community.

The Elko Chapter is tremendously grateful for the support of our meeting sponsors so far! National EWP Drilling, Just Refiners Inc., CGS Mule, ALS, EM Strategies, Gold Standard Ventures, REDCOR Drilling, IMDEX, AMC, Reflex, Nevada Gold Mines, Legarza, IDS, and Major Drilling

Call for GSN Volunteers! Join the Elko GSN Chapter committee for 2020-2021. We are looking for a vice-president and treasurer. Please contact dianehcheung@gmail.com for further information.



NEWS FROM THE GSN FOUNDATION

By Cami Prens, GSN Foundation Chair

We're all hoping things get back to normal soon. We're all making plans, then contingency plans, then updating those as timelines get pushed back. One thing we hope will happen this year is the UNR Geology Field Camp for graduating seniors. Kel Buchanan, Bill Howald, and Bob Thomas are the Foundation Board members charged with evaluating applications and choosing recipients. We've heard that they may make some changes to the usual format that would allow Field Camp to carry on so the Field Camp committee went ahead and took applications, read transcripts and letters of recommendation and awarded Field Camp scholarships to two deserving students, Quentin Burgess and Charlie Cryderman .

We won't be able to award the scholarships in person but Quentin and Charlie have been contacted and we hope to see them at a future GSN meeting to recognize them and hear about their experience. I look forward to having all the students GSN has supported come back as speakers for future GSN meetings!

With any luck we'll be able to see each other at a GSN meeting in the near future – maybe summer 2020? Cross your washed and sanitized fingers!

The thank-you letters below and on page 10 are being shared with you, our members and generous donors, so you all can see what good work your donations are doing. Five Graduate Students, 1 from UNR, 3 from CSM and 1 from UBC, received GSN Elko Scholarships to aid them in their individual research projects based exclusively in Nevada! The Elko Chapter raises money each year for this purpose and our GSN Foundation matches what they've raised! THANK YOU ALL!

Dear GSN Elko Chapter:

I would like to enthusiastically thank the officers, members, and donors who make the GSN Elko Chapter Scholarship possible. Your ongoing support enables students to produce high-quality, impactful research that promotes a better understanding of Nevada geology. This is a benefit to countless in the scientific community, and so widens the chapter's outreach beyond the individual recipients.

My academic accomplishments and my career path in economic geology would not have been possible without the guidance of a few key mentors. This is most likely true of fellow recipients of this award, my peers at the Colorado School of Mines, and perhaps all of you. We all stand on the shoulders of those who came before us. Thus, it behooves each of us to become teachers, mentors, and active participants in our communities, however big or small.

This award will directly fund my field work in Nevada. I hope that results are a benefit to our community, and I am excited to teach others what I have learned.

Thank you again for the opportunity afforded by this scholarship.

Sincerely,



Lauren Zeeck
Graduate Student, Economic Geology
CSM SEG President-Elect (2020-2021) Colorado School of Mines
lzeeck@mymail.mines.edu

March 2, 2020

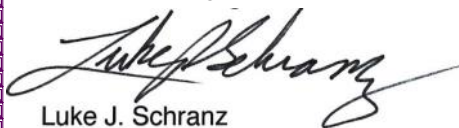
Dear GSN Elko Chapter Scholarship donors,

I am thrilled to be selected as one of the recipients of the Geological Society of Nevada Elko Chapter Scholarship. I am so grateful to be receiving this scholarship money which will help with my fees and tuition at the University of Nevada, Reno during the spring 2020 semester.

I am in my second semester as a graduate student pursuing a masters degree in geology at the Ralph J. Roberts Center for Research in Economic Geology (CREG) in the Mackay School of Earth Science and Engineering. I am researching the paragenesis and geologic setting of the Fire Creek low sulfidation epithermal deposit near Crescent Valley, Nevada under Dr. John Muntean as my advisor for my thesis. This has been a great experience so far as I have been learning much about ore deposits and economic geology as well as making solid progress on research. The scholarship money that the GSN Elko Chapter has awarded me helps me come closer to achieving my goal of attaining a masters degree in geology especially because the CREG program does not cover all of my tuition and fees. This allows me to focus more time on research and course work rather than working to cover fees, a true blessing.

I cannot thank the GSN Elko Chapter Scholarship donors enough for this benevolence. I am touched deeply by this generous scholarship and am extremely appreciative to be receiving it. Thank you again for allowing me to be a recipient of the Geological Society of Nevada Elko Chapter Scholarship for 2020.

With Kindest Regards,



Luke J. Schranz

Tadsuda Taksavas
2212 Ford Street, Apt. 1
Golden, Colorado 80401
Tel: (334)-587-1917
E-mail: ttaksavas@mines.edu

March 4, 2020

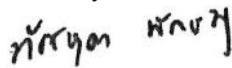
Dear GSN Elko Executive Committees,

My name is Tadsuda Taksavas and my nickname is Jan. I am very pleased and honored to be one of this year's recipients of the GSN-Elko Chapter Scholarship. I would like to take this opportunity to thank you for your generosity in funding this award.

I am currently a third-year Ph.D. student at the Department of Geology and Geological Engineering, Colorado School of Mines. I am working on textural characteristics of bonanza-style epithermal veins from a number of epithermal Au-Ag deposits including Nevada's deposits such as Buckskin-National, Elko Prince, Fire Creek, Hollister, Midas, and Sleeper, and overseas deposits such as Arista (Mexico), Chatree (Thailand), El Indio (Chile), and Hishikari (Japan). Aims of this research are to better document microtextural characteristics of ore and gangue minerals occurred in the epithermal veins and to find textural evidences pointing to the ore-forming processes that induce metal enrichments within the bonanza-style veins. The important goal of this study is to establish the most effective ore-forming process which produce a bonanza-style grade of ores in many epithermal Au-Ag deposits elsewhere. I hope to finish this research and my Ph.D. education within May 2021.

By awarding me this scholarship, I will put all my energy and abilities into doing all my best in this study. My research goals would not have been possible without your generous donation to the GSN-Elko Chapter Scholarship. Thank you so much again for your generosity and for enabling me to reach my research goals.

Sincerely,



Tadsuda Taksavas

GSN Elko Exec. Comm.
P.O. Box 2591
Elko, NV 89803-2591

Dear generous donors,

I'm writing to thank you for your contributions to the GSN Elko chapter at their summer and holiday meetings. Your contributions allowed the GSN to put together a scholarship for a student undertaking research relating to Nevada geology. I feel honored to be the 2020 recipient of this award, which will help me cover the costs of my fieldwork this summer. I plan to spend three months undertaking fieldwork in the Cortez region with the overarching goal of characterizing the hydrological regime that formed the Cortez Hills Carlin-type gold deposit. This fieldwork involves geological mapping to determine the structural framework of the deposit at the time of gold mineralization, identifying chemical and mineralogical alteration that define fluid flow pathways, mapping these fluid pathways, and determining the geological features that controlled auriferous fluid flow. I am also developing methods for determining the temperature and timing of ore fluid flow using clumped isotope thermometry and laser ablation U-Pb geochronology, respectively, on ore-stage carbonates.

I hope that my research will be of significance to both the exploration industry and academic community in northern Nevada so that I can feel that I have repaid your generosity.

Thank you once again.

Sincerely,



Andrew Steiner
Ph.D. student, Department of Earth, Ocean and Atmospheric Sciences
The University of British Columbia Vancouver Campus | Musqueam Traditional Territory
6339 Stores Road | Vancouver, British Columbia | V6T 1Z4, Canada
astein@eoas.ubc.ca

GEOLOGICAL SOCIETY OF NEVADA 2020-2021 BALLOT

This Ballot will also be attached as a separate file to your email so you can submit online!

In accordance with Article V, Section 4 of the GSN Constitution and Article II of the GSN By-Laws, the GSN Executive Committee and the GSN Board of Directors are recommending the slate of candidates listed below to serve as Officers for 2020-2021 and Directors for 2020-2023; these positions become effective on June 1, 2020.

The entire GSN membership has the right to vote separately on approving the elected positions to the GSN Executive Committee and the Class B three-year terms on the Board of Directors as presented below:

Board of Directors Class C* (three-year term, 1 June 2020 – 31 May 2023)

David Shaddrick

Mark Travis

FOR BOTH _____

AGAINST BOTH _____

Officers/Executive Committee of GSN (one-year term, 1 June 2020 – 31 May 2021)

President: Mary Stollenwerk

Vice President/President-Elect: Patsy Moran

Secretary: Steve Weiss

Treasurer: Robert Kastelic

Membership Co-Chairs: Patricia Capistrant and Kelsey Sherrard

Publications Chair: David Browning

FOR SLATE _____

AGAINST SLATE _____

CURRENT GSN MEMBER'S NAME: _____

(All votes must include your name as a member in good standing for 2020. Ballots without a name will not be counted.)

If you are receiving this notice by mail, please either mail your vote to: GSN, 2175 Raggio Parkway, Reno, Nevada 89512 or fax it to (775) 323-3599. In order for the vote on this ballot to be counted the completed **ballot must be received in the GSN office on or before 11:59 pm on Friday, April 17, 2020.** Thank you for your participation.

You can vote electronically by using Survey Monkey at this link: <https://www.surveymonkey.com/r/DRSVT2H>)

* Elected members of the Board of Directors serve three-year terms, which are renewable at the end of the term. Class A Directors (with terms ending May 31, 2021) are Bob Thomas and John Watson. The Class B Directors (with terms ending May 31, 2022) are David Caldwell and Greg French. Other members of the Board include the current GSN President, the GSN Immediate Past President, and current Presidents of the Elko, Southern Nevada, and Winnemucca Chapters. The Nominating Committee includes these latter five individuals and the Chair of the Board of Directors.

Thank you to our Dedicated Symposium Organizing Committee Volunteers!

GSN Symposium Chair

Eric Struhsacker

GSN Symposium Co-Chair

Eric Ruud

Technical Program Co-Chairs

Molly Hunsaker, Curtis Johnson
and Mike Ressel

Exhibits Co-Chairs

Mary Stollenwerk and Tony Gesualdo

Posters and Core Shack Co-Chairs

Don Hudson and Patsy Moran

Papers/Publications Co-Chairs

Fleetwood Koutz and William Pennell

Registration Co-Chairs

JoAnn Newbury and Debbie Schneider

Short Courses Co-Chairs

Dave Browning and Alan Morris

Field Trips Co-Chairs

Kristen Benchley, Joe Kizis, Jr.,
Lucia Patterson and Elizabeth Zbinden
F.T. Leaders: Jean Cline, Elliot Crist, Mark
Coolbaugh, Jim Faulds, Don Hudson, Rich
Koehler, Ellie Leavitt, John Marma, Justin
Milliard, Nancy Richter, and Randy Vance

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D. Heitt, R. Henkle, C. Henry, B. Howald, G. Hill,
D. Hudson, B. Hunsaker, M. Hunsaker,
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D. Shaddrick, K. Sherrard, S.C. Smith,
R. Steininger, D. Strachan, D. Struhsacker,
E. Struhsacker, D. Sturmer, T. Taylor,
B. Thomas, T. Thompson, C. Thorman,
P. Vikre, S. Weiss, T. Wilton, J. Wright, S. Wyld,
L. Volpi, E. Zbinden, F. Zoerner and A. Zuza

Mining Activity Update

Mike Brady, February 2020

www.activityupdate.com

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Rio Tinto Ltd. announced that it acquired an option to earn a 55% interest in the New York Canyon Property from Emgold Mining Corp. for \$5,000,000 in exploration expenditures over 5 years. (resource = 63,600,000 tonnes @ 0.60% Cu inferred) *Press Release:* February 12

Kinross Gold Corp. announced that recent drill results at the Bald Mountain Project include 157.6-167.2 meters @ 15.8 gpt Au (WRD19-018); 150.9-163.1 meters @ 2.6 gpt Au (WP19-013); 149.4-160.0 meters @ 3.4 gpt Au (WP19-014) and 102.1-161.5 meters @ 1.1 gpt Au (WP19-026). (reserve = 63,999,000 tonnes @ 0.6 gpt Au proven+probable) *Press Release:* February 12

Kinross Gold Corp. announced that recent drill results at the Round Mountain Project include 157-221 meters @ 2.1 gpt Au (EH-11030); 153.9-208.8 meters @ 2.4 gpt Au (EH-11031); 175.3-219.5 meters @ 8.4 gpt Au (D-1029) and 146.3-190.5 meters @ 1.23 gpt Au (D-1030). (reserve = 100,838,000 tonnes @ 0.7 gpt Au proven+probable) *Press Release:* February 12

Gold Resource Corp. announced that recent drill results at the Isabella Pearl/Scarlet Project include 30.48-45.72 meters @ 0.59 gpt Au (IPRC-087); 79.25-96.01 meters @ 1.49 gpt Au (IPRC-088); 96.01-179.83 meters @ 8.58 gpt Au (IPRC-090) and 126.49-152.4

meters @ 18.04 gpt Au (IPRC-091). (reserve = 2,694,000 tonnes @ 2.22 gpt Au, 13 gpt Ag proven+probable) *Press Release:* January 29

NuLegacy Gold Corp. announced that recent drill results at the Red Hill Project include 353.0-358.2 meters @ 9.6 gpt Au (WS19-02). *Press Release:* February 18

Ely Gold Royalties Inc. announced that it acquired the HNT and JAM unpatented claims within the Gold Bar District from private interests for \$125,000 cash and 100,000 shares. *Press Release:* February 12

Corvus Gold Inc. announced that recent drill results at the Mother Lode Project include 216.41-225.55 meters @ 0.67 gpt Au (ML20-129); 214.88-231.65 meters @ 0.78 gpt Au (ML20-130) and 158.5-214.88 meters @ 1.92 gpt Au (ML20-131). (resource = 13,226,000 tonnes @ 1.72 gpt Au measured+indicated) *Press Release:* February 25

Contact Gold Corp. announced that recent drill results at the Green Springs Project include 76.2-114.3 meters @ 3.53 gpt Au (GS19-09) and 12.12-35.05 meters @ 1.02 gpt Au (GS19-10). (resource = 754,500 tonnes @ 2.05 gpt Au inferred) *Press Release:* February 12

OTHER UPCOMING EVENTS

May 13-23, 2021: GSN SYMPOSIUM 2021—VISION FOR DISCOVERY

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Mining essential to US COVID-19 response

Homeland Security names miners among critical workforce

By Shane Lasley, March 30, 2020, reprinted with permission from North of 60 Mining News, Eagle River, Alaska



Department of Homeland Security listed miners as part of the critical infrastructure workforce that should maintain work schedules to assist the United States' response to COVID-19.

As the United States hunkers down to flatten the curve of the COVID-19 pandemic, it remains imperative for the nation to maintain the critical infrastructure needed to respond to the global emergency and ensure systems remain intact for after the coronavirus has passed. The Department of Homeland Security considers mining among 16 critical infrastructure industries that "have a special responsibility in these times to continue operations."

In its March 28 "Guidance on the essential critical infrastructure workforce," DHS said "workers necessary for mining and production of critical minerals, materials and associated essential supply chains" should be part of the critical workforce that maintains their work schedules to aid in the United States' response to the coronavirus outbreak.

This includes workers engaged in the manufacture and maintenance of equipment and other infrastructure necessary for mining production and distribution.

The National Mining Association today applauded Homeland Security for reiterating its pre-COVID-19 guidance that mining is included among America's critical infrastructure sectors.

"Mining underpins every aspect of our economy, providing the metals, minerals and coal that are essential to nearly every sector identified as critical infrastructure under DHS' Cybersecurity and Infrastructure Security Agency National Infrastructure Protection Plan. It was gratifying to see DHS reiterate the importance of our industry during this crisis," said National Mining Association President and CEO Rich Nolan.

While mining, and the products made from the minerals and metals it produces, can be found in every sector of business, DHS named energy and critical manufacturing as two particular segments of America's essential economy that need mined materials.

"Our nation needs stability right now. We need a dependable supply chain for our manufacturing sector. And we need to know that our power sector is secure across the country," said Nolan.



Department of Homeland Security: Mining and the products made from the minerals and metals it produces can be found in every sector the Department of Homeland Security considers essential during the COVID-19 pandemic, especially energy and critical manufacturing.

The critical manufacturing section of the Homeland Security document underscores how essential mining is to the other sectors of the U.S. COVID-19 response and economy.

Under this section, DHS named "workers necessary for the manufacturing of metals (including steel and aluminum), industrial minerals, semiconductors, materials and products needed for medical supply chains, and for supply chains associated with transportation, energy, communications, information technology, food and agriculture, chemical manufacturing, nuclear facilities, wood products, commodities used as fuel for power generation facilities, the operation of dams, water and wastewater treatment, processing and reprocessing of solid waste, emergency services, and the defense industrial base" as critical to America's infrastructure.

While its "Guidance on the essential critical infrastructure workforce," is advisory in nature, DHS urges state and local governments and business to "consider the implications of business operations beyond the jurisdiction where the asset or facility is located" when discussing which workers are critical to the nation's infrastructure.

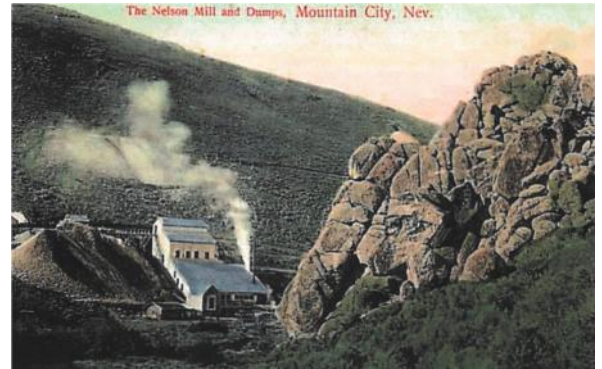
"Businesses can have sizeable economic and societal impacts as well as supply chain dependencies (continued on page 15)

Elko Conference - Mining History Association POSTPONED UNTIL JUNE 2021!

The Mining History Association (MHA) is planning their 30th Annual Conference in Elko, Nevada, in June 2021, right after the Elko Mine Expo. The Mining History Association is a group of individuals, mainly throughout the US, who share a common interest in mining history and in documenting and recording the important role that mining has played in the North America's advancement throughout time. The group is diverse, from all over the country, and includes miners, metallurgists, and geologists (many retired) as well as people in academics or just folks interested in mining. This year's conference wants to highlight the historic and current significance of the important mining center in and around Elko. Planning and organizing for the meeting is in full swing.

The host hotel is the Red Lion. Two days of oral presentations are flanked by tours of the area mines, both active and long idle. The MHA conference committee is currently organizing a series of field trips to neighboring mining areas of interest including the Carlin Trend, Cortez and Eureka. The field trips will focus on the historic aspects of these mining areas but will also highlight the current mining activities in the districts. Dean Heitt, retired geologist with Newmont, will be the field trip leader of the proposed Carlin portion of the tour. Dean recently published "Before the Gold: Early Mining History of the Carlin Trend 1874-1961". Robert McQueen will lead the Cortez portion of the proposed tour. Robert is the Co-author of the book, "Historical Archaeology in the Cortez Mining District: Under the Nevada Giant". Richard Reid, also a retired Newmont geologist, will lead the Eureka field trip and this will focus on the historic downtown Eureka and selected historic mine sites. The MHA is anticipating up to 150 participants to this event which should bring a significant amount of commerce to the local economy.

Information about the Mining History Association's conference can be found on the Association's website: www.mininghistoryassociation.org or by contacting Richard Reid, richardreid.geo@gmail.com. The association welcomes any Elko or local folks to attend for a small attendance charge, welcomes potential vendors who may be interested in a booth during the conference and also will accept any contributions for our event. The Mining History Association is a 501C(3) non-profit public charity and any contributions are tax deductible.



Richard Reid
General Chair, Elko Conference, Mining History Association
3 Spring Creek Lane, Spring Creek, NV 89815
775-934-3948

Rock Talk, (continued from page 14)

that are geographically distributed," Homeland Security penned in its guidance.

DHS advises critical infrastructure sectors such as mining to remain vigilant in following Centers for Disease Control guidance, as well as state and local mandates, to limit the spread of COVID-19 while providing the essential services to fight the spread of the disease and recover once this global medical emergency has passed.

Author Bio: Shane Lasley, Publisher

Over his more than 11 years of covering mining and mineral exploration, Shane has become renowned for his ability to report on the sector in a way that is technically sound enough to inform industry insiders while being easy to understand by a wider audience.

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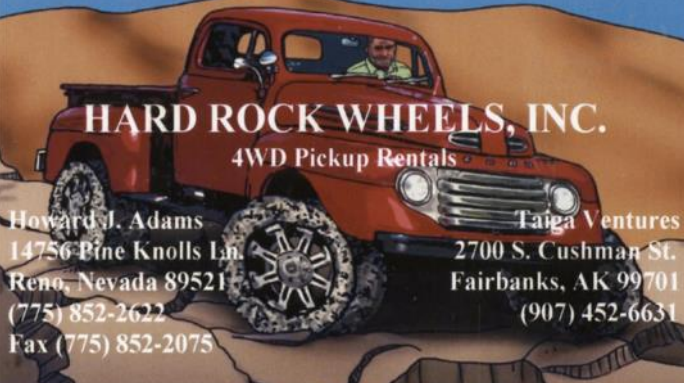
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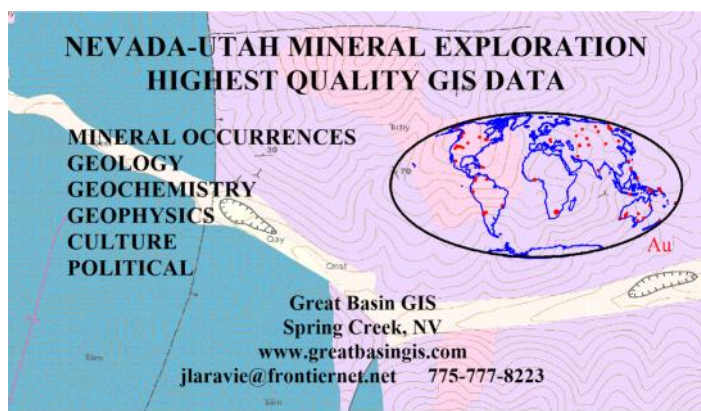


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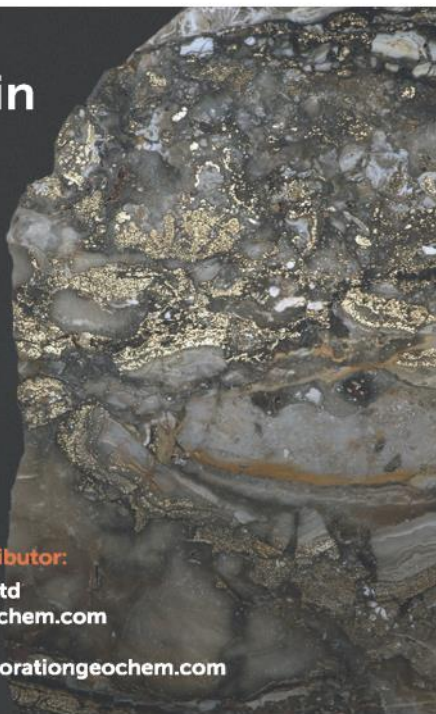
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