

# GEOLOGICAL SOCIETY OF NEVADA NEWSLETTER

Geological Society of Nevada, 2175 Raggio Parkway, Reno, NV 89512  
(775) 323-3500 - Hours Monday -- Friday, 10 a.m. to 5 p.m.

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**FEB. 4, 2025  
TUESDAY  
4 PM—7 PM**

**FEB. 13, 2025**  
**THURSDAY**

**FEB. 20, 2025**  
**THURSDAY**

**FEB. 21, 2025**  
**FRIDAY**

**FEB. 27, 2025**  
**THURSDAY**

**2025 DIRECTORY PICK UP PARTY** will be at the Great Basin Brewing Co., 5225 SO. Virginia St., Reno, NV. Stop by, pick up your directory, and have a beer, courtesy of **SRK Consulting**! We appreciate all those who are able to attend this event that helps to save the GSN some postage.

## GSN WINNEMUCCA CHAPTER

The GSN Winnemucca Chapter meeting will be held at the Martin Hotel, 94 W. Railroad St. **SPEAKER: Janine Andrys, Boise State University Postdoctoral Research Fellow. TITLE: “*Submarine Lavas of the Galapagos*”. SPONSOR: TO BE ANNOUNCED.** For more information, please contact Chapter President, Kris Alvarez at: [kalvarez@i80gold.com](mailto:kalvarez@i80gold.com). Details on pg. 6.

## GSN ELKO CHAPTER

The GSN Elko Chapter membership meeting will be held at the Western Folklife Center, 501 Railroad St. Elko, NV. **SPEAKER: Marcus Angus, MS Student, CREG Program, UNR. Title: “Constraining Mineralization and Alteration Through New Geologic Mapping at Spring Peak Low-Sulfidation Epithermal System, Mineral County, NV”.** **SPONSOR: TO BE ANNOUNCED.** Please contact Elko President, Ajeet Milliard [Ajeet@megllc.net](mailto:Ajeet@megllc.net) for more information. details on page 7.

## GSN REGULAR MEMBERSHIP MEETING

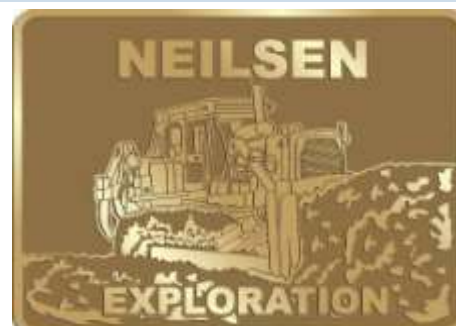
The GSN meeting will be at the Atlantis Hotel & Casino in Reno, NV.  
**SPEAKER: Dr. Winnie Kortemeier, Western Nevada College. TITLE:**  
**“Lake Tahoe: Evaluating the Science - and the Hype - of One of the**  
**World’s Oldest Freshwater Permanent Lakes”. SPONSOR: NEILSEN**  
**EXPLORATION.** Dinner cost is \$60 per person. Please register for dinner  
 online or RSVP at this link: [RSVP/DINNER](#). **PLEASE RSVP BY 5PM ON**  
**MONDAY, FEBRUARY 17TH.** [gsn@gsnv.org](mailto:gsn@gsnv.org). Details on page 3.

## GSN SO. NEVADA CHAPTER

The GSN So. Nevada Chapter meeting will be held at the Beatty Community Center. **SPEAKER: Al Turner, Fortitude Gold. TITLE: “The County Line conundrum: unraveling the mystery behind two distinct gold deposits”.** **SPONSOR: WALSH RECLAMATION.** For more information, please contact Chapter President, Liz MacDonald at: [liz\\_macdonald@outlook.com](mailto:liz_macdonald@outlook.com). Details on pg. 8.

GSN febrUARY RENO MEETING SPONSOR

**NEILSEN  
EXPLORATION  
LLC**



## ***FROM THE PRESIDENT—FEBRUARY 2025***

***Patty Capistrant***

***GSN President June 1, 2024-May 31, 2025***



Geologists may not be the first profession that comes to mind when thinking about the stars of the big screen. But in celebration of Hollywood's award season, I thought I would take a moment to highlight some films that shine a spotlight on geology as a vital and fascinating profession. Here are some noteworthy examples of movies featuring geologists and how they celebrate the science of the Earth.

### ***Dante's Peak (1997)***

Topping my list perhaps the perfect embodiment of geologic fantasy. Pierce Brosnan stars as a USGS volcanologist working in a small cascade town when the local mountain erupts, sending the geologist on a high-suspense adventure. The film dives into dangers and unpredictability of living near active volcanoes. While the movie dramatizes volcanic eruptions, it highlights the critical role geologists play in disaster preparedness and early warnings, potentially saving countless lives.



### ***Jurassic Park (1993)***

Though primarily about paleontology, geology plays a significant role in this action-packed fantasy. The creation of Jurassic Park's dinosaurs relies on the fossilized amber as a source of preserved DNA. The film showcases how geology and related fields contribute to understanding Earth's ancient history, fostering fascination with the natural world. I'd like to see another sequel featuring Nevada's Ichthyosaurus as the main attraction!



### ***Journey to the Center of the Earth (2008)***

This version, which is more inspired by than based on Jules Verne's classic novel, follows Brendan Fraser, a volcanologist who embarks on a fantastical journey through subterranean realms. While the movie takes liberties with geology, it sparks curiosity about Earth's layers and inspires interest in exploration and discovery. If the movie is not for you, the book is an absolute classic for geologic fantasy!



These films, while often straying from scientific accuracy, celebrate geology's significance in our culture. They remind audiences that the Earth is not only our home but also a source of endless wonder—and geologists are its storytellers, unlocking secrets millions of years in the making.

Sharing more scientifically accurate stories about the Earth's history this month will be Dr. Winnie Kortemeier, who will be presenting on her recent work deciphering the age of our beloved Lake Tahoe. Please join us at the GSN regular meeting on February 21 to hear about it, see page 3 for more details. In Elko, the speaker will be Marcus Angus (details on pg. 9), and in Winnemucca, they will be hosting Janyn Andrys (details on pg. 8). Our Southern Nevada Chapter has re-formed under the leadership of Elizabeth MacDonald, and they will be hosting their first meeting February 27 in Beatty! See page 10 for more details. As always, thanks for reading. Hope to see you all soon!

Patty

GSN MEETING. RENO, NEVADA—FRIDAY, FEBRUARY 21, 2025

GUEST SPEAKER: Dr. Winnie Kortemeier, Geosciences Professor  
Western Nevada College

TITLE: Lake Tahoe: Evaluating the Science - and the Hype - of  
One of the World's Oldest Freshwater Permanent Lakes

Sponsor: NEILSEN EXPLORATION LLC

TIME: Drinks @ 6:00 pm, Dinner @ 6:30 pm, Talk @ 7:30 pm

WHERE: Atlantis Casino & Hotel, upstairs Grand Ballrooms

\*\*meeting will be livestreamed and recorded, watch email for link\*\*

**DINNER COST: \$60. RSVP /Register online no later than Monday, February 17th here: [RSVP/DINNER](#)**

**Abstract:**

In the world of lakes, how old is old? The term “ancient lake” refers to lakes that have consistently held water for over a million years. Lake Tahoe, at 2.3 Ma (based on 40Ar-39Ar dating of lavas that flowed into and over lacustrine sediments deposited in the NW part of the Tahoe basin) is officially an ancient lake, but one of the world’s oldest? “Yes”, according to data, but “no” according to most google searches (lake ages up to 70 Ma!) We will explore the geology that enabled Lake Tahoe to be dated at 2.3 Ma and the criteria used to ascertain the ages of the world’s oldest lakes. Following is the GSA abstract that started it all:

<https://gsa.confex.com/gsa/2024AM/meetingapp.cgi/Paper/405032>

Lake Tahoe, USA – World’s Third Oldest Fresh-water Permanent Lake?  
Kortemeier, Winifred T.

Lake Tahoe, located along the border of California and Nevada, USA, is at least 2.3 Ma based on 40Ar-39Ar dating of basalts and trachyandesites that flowed into and over lacustrine sediments deposited in the NW part of the early, shallower lake, referred to as proto-Tahoe. Basalts and trachyandesites interacted with the contemporaneous lacustrine sediments during three different time intervals, at 2.3 Ma, 2.0 Ma, and 0.92 Ma forming pillow lava with glassy, palagonitic rinds, peperites, and baked margins in the sediments, among other hydrovolcanic features. Several of the sediment samples contain *Pliocaenicus* diatoms, corroborating the ancient age of the lake as well as the warmer, shallower lake conditions that existed in this part of the lake during the basaltic volcanism as compared to the deep (1645 ft (498 m)), cold-water conditions that currently prevail. Lake Tahoe resides in a tectonically active, extensional fault-block basin that has enabled the lake to endure, consistently, through the millions of years rather than succumb to sediment infilling as is typical of most lakes. Two of the oldest fresh-water permanent lakes in the world, Lake Baikal, Siberia (5-10.3 Ma, based on dating of continuous sedimentary sequences recovered through core drilling) and Lake Tanganyika, East Africa (8-10 Ma, similarly determined by dating of a continuous sedimentary sequence from drill core) are also located in extensional fault-block basins, with Lake Tanganyika occupying one of the deepest basins of the East African Rift. Other lakes considered to be among the world’s oldest fresh-water permanent lakes are Lake Biwa, Japan (1.5 Ma in current basin), Lake Pingualuk, Nunavik, Canada (1.4 Ma based on date of meteor impact), Lake Ohrid, Balkans (1.36 Ma based on tephrochronologic and paleomagnetic studies of the lacustrine sediments), Lake Malawi, southeast Africa (1.2 Ma based on tephrochronology and luminescence dating of drill core), and Lake Titicaca, Bolivia/Peru (0.37 Ma from drill core analysis). Much older ages for many of these lakes and others appear to have been derived from dating the inception of basin development as a proxy for lake ages or on undocumented general statements. Evaluating known ages of the world’s oldest lakes leads to the conclusion that Lake Tahoe may be the third oldest fresh-water permanent lake in the world.

...And the Western Nevada College article that is estimated to have reached 120 million people in its various forms and outlets

<https://wnc.edu/news/lake-tahoe-third-oldest-lake-kortemeier.php>



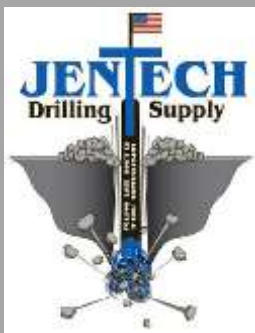
(cont. from page 3)

**Speaker Bio:**

Winnie Kortemeier is professor of Geosciences at Western Nevada College in Carson City, Nevada. She has been at WNC since 1989. Before that, she worked for a gold mining company and a land survey company. She completed her PhD on the Pleistocene volcanic rocks in the northwest part of the Tahoe basin in 2012.



***GSN wishes to thank the  
JANUARY meeting  
sponsors in Reno, Elko,  
and Winnemucca!***



# “FACES OF GSN”

**Kyle E. Larson**  
**Boise, Idaho**  
**Part 1**

EXTRADOS

January 25, 2025

Dear GSN Members,

As I draft this letter about my identity, I can not help but to reflect on the interwoven relationship I have between my profession and life. My journey with the rock record begins with my parents, Steven and Ivy Larson, who have encouraged me to follow my heart and count my blessings along the way. They gave me my first set of specimens for learning in my youth where I spent most of my time outside, exploring Washington and all it had to offer. Little did I know that I would become a geologist.

My heart chased a dream to play blue collar lacrosse at Sonoma State, study wine-making, and become an attorney, so I instantly ventured into philosophy. My lure to practice economic geology came while drafting a paper on wisdom through self-observation in the moment. I found myself appreciating the evolution of the aluminum can sitting on my desk providing scales of economy, convenience, and joy to modern society. I knew I wanted to search for ore. This led me to a moment at Bodega Head in Sonoma County, where Tom Anderson taught me how to discover a geologic story by jumping scale after many lectures, road cuts, outcrops and beaches. I believe these “ah-ha” moments are impactful for geologists, they often require a long build, and they create a spiritual sense of discovering the bigger picture through story. If done right, I consider it a “meeking” process, this resonates with me.

The blessing of my career has always been the people and teams that I have had the pleasure to work with, which many of whom are Members. I enjoy the burden we place upon ourselves in the search for a response that merits reason. I view our sport as a great never-ending volley with the opponent being a rock. It’s a humbling match for everyone. If I could condense a rich fluid of myself and encapsulate it within the record of our Society, it would be my intercalated perspective:

*“Discovering order within the emotional chaos of an ore deposit story not only benefits our mind but, if carefully reflected upon, provides an opportunity for our heart to see the grand scale,”* I love that.

The Geological Society of Nevada is packed full of my mentors, all of whom have encouraged me and provided their storied perspectives. On February 3, 2025, I will be 39 years old and have spent most of my career outside exploring the depths of Nevada and all it has to offer, (*including a shared birthday with Joshua Wilkins and Michael Say*). A specimen description of myself would identify Kyle as a Nevada- geo who often wanders outside the field area.

Thank you Christian and Bob for asking me to take part in Faces, you are great mentors. Most of all thank you to the Members and Laura for keeping the ship on course. Until the next drill hole or outcrop, I will remain excited to map our journey with the rock record together!

Warmest Regards,





## Gsn Winnemucca CHAPTER NEWS



### Please join us for the **Winnemucca GSN February Meeting**

Thursday, February 13th, 2025

The Martin, 94 W. Railroad St.

**Food and Drinks at 6 pm**

**Talk at 7 pm**

**Speaker:** Janine Andrys, Boise State University Postdoctoral Research Fellow



**Talk:** *“Submarine Lavas of the Galápagos”*

**FOOD AND BEER SPONSOR: TO BE ANNOUNCED**

**Abstract:** The Galápagos Archipelago sits atop a submarine platform that extends ~3000 meters down to the seafloor. This Platform makes up the volume majority of the Galápagos and is different from the structure of other well studied ocean islands, like Hawaii, which typically display a continuous island chain with steep submarine banks. While extensive work has been conducted characterizing the subaerial lavas of the Galápagos, little has been done on the submarine lavas that make up the Platform. In 2023, we conducted two research expeditions to survey and sample the Galápagos Platform, utilizing high-resolution shipboard multibeam bathymetry, human-occupied vehicle *Alvin*, and remotely operated vehicle *SuBastian* to conduct our work. In this talk, I will present the results of these research expeditions, highlighting our visual observations of the lava flows and accompanying biological habitats, in addition to new geochemical results of the Platform lavas, which we use to constrain an constructional model of the Galápagos that incorporates both the subaerial and submarine portions of the archipelago.

**Bio:** Janine Andrys is an igneous petrologist and high-temperature geochemist that specializes in the crystallization of basaltic magmas and identifying the geochemical fingerprints of processes related to recycling in the mantle, mantle heterogeneity, and mantle evolution. Her work employs high-precision geochemical analysis of volcanic rocks and glasses, as well as bathymetric and field observations of the seafloor. Janine received her B.S. in Earth Sciences from the University of Minnesota and her PhD in Marine Geology from the University of Rhode Island Graduate School of Oceanography. Janine is a current Postdoctoral Research Fellow at Boise State University.

*If you have any questions, contact Kris Alvarez at [kalvarez@i80gold.com](mailto:kalvarez@i80gold.com) or 775-621-6195*



**Elko Chapter Meeting**  
**Thursday, February 20, 2025**  
**Western Folklife Center, 501 Railroad St., Elko, NV**  
**Drinks and Appetizers at 6 pm; Talk at 7 pm**

**Speaker: Marcus Angus, Master's Student, CREG Program and partially funded by GSN Scholarships**

**Title: Constraining Mineralization and Alteration Through New Geologic Mapping at Spring Peak Low-Sulfidation Epithermal System, Mineral County, NV**

**FOOD & DRINKS SPONSORS: TO BE ANNOUNCED**

**ABSTRACT:**

Marcus J. Angus, Simon Jowitt

*Ralph J. Roberts Center for Research in Economic Geology, Department of Geological Sciences and Engineering,  
University of Nevada, Reno*

Spring Peak is a newly discovered sinter-vein system in Mineral County, NV with a well-preserved epithermal footprint at surface and is being actively explored by Headwater Gold, Inc. The Spring Peak system is hosted within a region constructed of Mesozoic metavolcanics and metasediments, Cretaceous granitic rocks related to satellite plutons of the Sierra Nevada batholith, Miocene subduction-related volcanics and associated volcanoclastics, and Late Pliocene-Pleistocene volcanic centers. The age of mineralization at Spring Peak has yet to be constrained and pending  $^{40}\text{Ar}/^{39}\text{Ar}$  dating of adularia in mineralized drill core, coupled with rhyolite domes collected at surface, will determine whether Spring Peak has similar Miocene mineralization analogous to the nearby Aurora Mining District, or if Spring Peak is a potentially younger sinter-vein system. High-grade gold mineralization ( $>15\text{g/t}$ ) occurs on property within boiling horizons of structurally controlled hydrothermal upwelling zones. One of these upwelling zones lies directly beneath the outcropping sinter, where high-temperature sinter lithofacies (geyserite) overlies adularia altered and silicified volcanic epiclastic sediments. Sinters are surficial expressions of low-sulfidation epithermal systems and form where silica oversaturated alkali-chloride fluids are expelled in hot spring deposits, forming a predictable gradient in lithofacies with distance from the vent source. New geologic mapping at Spring Peak aims to describe lithology, trends in alteration, and identify favorable structural controls in order to delineate additional upwelling zones with potential to host previously unrecognized gold mineralization. Detailed mapping of the Spring Peak sinter and preserved lithofacies is used to elucidate the locations of high-temperature vent conduits and low temperature, distal-apron fluid pathways, and validates the spatial and temporal relationships of sinter deposition with gold mineralization at depth. Epithermal alteration is most intense along a silicified ridge, which is bounded by NNE striking normal faults and NW striking oblique dextral faults, forming a fertile fault intersection near sinter deposition. The mapping of lithologies, alteration and sinter facies at Spring Peak provides a template for similar studies elsewhere that will actively contribute to exploration targeting in low-sulfidation epithermal systems.

**For more information, contact GSN Elko Chapter President, Ajeet Milliard, [ajeet@megllc.net](mailto:ajeet@megllc.net)**



### Welcome to the new GSN Southern Nevada Chapter!

As announced in the December 2024 newsletter, we are officially kicking off the re-opening of the Southern Nevada Chapter of the GSN with our first meeting this month. Mark your calendars for February 27 at 6pm at the Beatty Community Center in Beatty, Nevada.

**When: Thursday, February 27, 2025**

**Time: Drinks and Appetizers @ 6pm, Talk @ 7pm**

**Speaker: Al Turner, Fortitude Gold**

**Talk title: “The County Line conundrum: unraveling the mystery behind two distinct gold deposits”**

**Where: Beatty Community Center (100 A Ave S, Beatty, NV 89003)**

**Food and drinks sponsor: Walsh Reclamation**



**FORTITUDE GOLD**

Since this is the first meeting and we are still gauging interest in the Southern Nevada Chapter, please [RSVP](#) by Tuesday, February 25 (if you miss the deadline or have questions, please reach out by emailing us at [liz\\_macdonald@outlook.com](mailto:liz_macdonald@outlook.com)).



# 2027 Symposium Logo Contest!

2027 GEOLOGICAL SOCIETY OF NEVADA SYMPOSIUM



# WANTED



## 2027 SYMPOSIUM LOGO COMPETITION IS NOW OPEN!

### ORE DEPOSITS OF THE GREAT BASIN KEY TO AMERICA'S MINERAL INDEPENDENCE



1987 BY LANE GRIFFIN



PRIOR SYMPOSIUM WINNING LOGOS

GSN 2022 SYMPOSIUM



VISION FOR DISCOVERY  
BY RANGEFRONT



1990



2005



2010 BY NANCY WOLVERSON



SUBMISSIONS BY 28TH FEBRUARY 2025  
BY EMAILING TO  
[SECRETARY@GSNSYMPOSIUM.ORG](mailto:SECRETARY@GSNSYMPOSIUM.ORG)  
LOGO VOTE MARCH 2025



1995



## LOGO WINNER - \$200 CASH

PROUDLY SPONSORED BY THE GSN



# 2027 Symposium Update

## 2027 GSN Symposium (27GSNS) – January 2025 Update

**Symposium Event Dates:** Thursday 22 April to Saturday 1 May 2027

**Location:** The Nugget Casino, Reno Nevada USA

**Theme:** Ore Deposits of the Great Basin – Key to America’s Mineral Independence nominated by Jessica Bogossian.

**News of the month:** The first meeting of the 2025 year was held 13<sup>th</sup> January 2025, the Symposium Treasurer nomination of Christina Ricks was voted in at this meeting. The Symposium Steering Committee has now finished laying the foundations for the Symposium to proceed, so it was fantastic to hear enthusiastic discussions in our first meeting regarding the event, sub-committees, fundraising etc., and now the **FUN WORK** of designing the **GEOSCIENCE EVENT** can commence in earnest. Any junior Geoscientist that has a career goal to become a Senior Educator, Mining Executive or CEO, is encouraged to get involved and volunteer in the Symposium as the meetings are hybrid-zoom and can be attended remotely, even from field camps with good comms! You’ll get great networking exposure and opportunities to professionally contribute alongside Nevada’s leading Geoscientists.

The **2027 Symposium Logo competition** was launched in January 2025, and GSN members, family and friends including schools are encouraged to enter by creating a logo design in the theme “Ore Deposits of the Great Basin – Key to America’s Mineral Independence”. The winning cash prize of \$200 is generously sponsored by the GSN. Members and non-members are welcome to enter by **28<sup>th</sup> February 2025**. Any winning school entries will have their school and individual recognized at the event and on the Symposium website (yet to be launched). GSN members please kindly distribute the competition flier within your networks to ensure we receive plenty of fantastic logos to launch the logo voting competition in March 2025. **It’s a great opportunity to promote Geoscience in our schools (big and small)**. The March 2025 logo voting will only be open to GSN Members.

The Steering Committee is currently working through the various sub-committee volunteers, and several **GSN Geoscience Leaders** have stepped up as Sub-Committee Lead Chairs and Co-Chairs with nominations listed below. We have not yet reached out to all the volunteers (so thank-you for your patience), as we are continuing to work through the priority list in February and hope to have all the key roles assigned by end of March 2025, this will give the Sub Committees two years to plan and prepare for the Symposium event.

We **THANK** all the volunteers that have stepped up as **GEOSCIENCE LEADERS** to help prepare and deliver the **2027 GSN Symposium**.

Sub Committee	Lead Chair	Sub-committee members
Fundraising (all inclusive)	Kel Buchanan Christopher Dail (Co)	Dawn Lee Snell Mike Power
Technical (all components)	Dr Marcus Johnston Richard Bedell	
Core Shacks	Patricia Capistrant Danielle Schmandt	
Social events, prizes, facilities	Ed Orbock	
Social media & Event application	Daniel Chafetz	Dawn Lee Snell (Linked In)
Lithium Session	Dr Chris Henry	Some ORE-some ideas getting thrown around for this session

We also thank the nominated **Veteran Symposium Advisors** for once again availing their time to help provide **much valued advice** to those co-ordinating the 2027 event.

Name (GSN Veteran)	Advisory role
Eric Struhsacker	Steering Committee Advisor
David Shaddrick	General Advisor
Dr Jonathan Price	Technical Advisor



# 2027 Symposium Update (cont.)

## 2027 GSN Symposium (27GSNS) – January 2025 Update

### IN-KIND ASSISTANCE REQUESTED FROM GSN MEMBERS in return for event sponsorship advertising

1. The Symposium Committee is still looking for an alternative meeting venue to that of the NBMG building for the monthly meetings. Facilities required include conference room with remote internet access and Zoom suitable visual-audio facilities, if you or your company would like to open your conference room for our monthly meeting, please kindly contact Secretary Christine Ballard.
2. We are looking for an In-Kind professional bookkeeper to manage and prepare monthly reports for the GSN Symposium in return for sponsorship advertising. If you are a cash strapped junior or have additional book keep capacity for the next two years and can provide monthly reports, kindly email the Symposium Secretary. If this request is not fulfilled by GSN members by March 2025, a professional bookkeeper will be sort in return for in-kind advertising of their business.
3. **The next meeting is 10<sup>th</sup> February 2025 4-5pm PT**, additional volunteers and interested parties, kindly contact Secretary Christine Ballard to receive the meeting details.

Wishing everyone a great month ahead, take care on the road and travel safely,

From the 27GSNS Symposium Steering Committee

Regina Molloy (Reno) – Chairperson - [chairperson@gsnsymposium.org](mailto:chairperson@gsnsymposium.org)

Mark Travis (Elko) - Deputy Chairperson - [depchairperson@gsnsymposium.org](mailto:depchairperson@gsnsymposium.org)

Christine Ballard (Reno) – Secretary - [secretary@gsnsymposium.org](mailto:secretary@gsnsymposium.org)

Treasurer (Elko) – Christina Ricks



## A Note About Meeting Attendance in Reno

While long-time members are likely familiar with our meeting attendance policies, we would like to provide a helpful reminder for our newer GSN members regarding the etiquette of attendance.

If you are a current GSN member, you're welcome to attend any of the regular meetings (those held from September to May) free of charge. If you would like to attend the meeting simply to socialize, have a drink, and watch the talk, no RSVP is necessary. However, if you plan to have dinner, please RSVP and pay by the Monday before the meeting. This is essential so we can provide the Atlantis caterers with an accurate headcount for meals. It's also worth noting that the GSN does not make money on membership meeting dinners – we simply pass the cost through.

If you would like to bring a non-GSN member to attend a meeting, we ask that you consider a \$5 donation to the GSN. Moreover, we hope your guest enjoys the event so much that they promptly become a GSN member!

We look forward to seeing you at our upcoming meetings this season!



# NEWS FROM THE FOUNDATION

February, 2025

Bob Felder



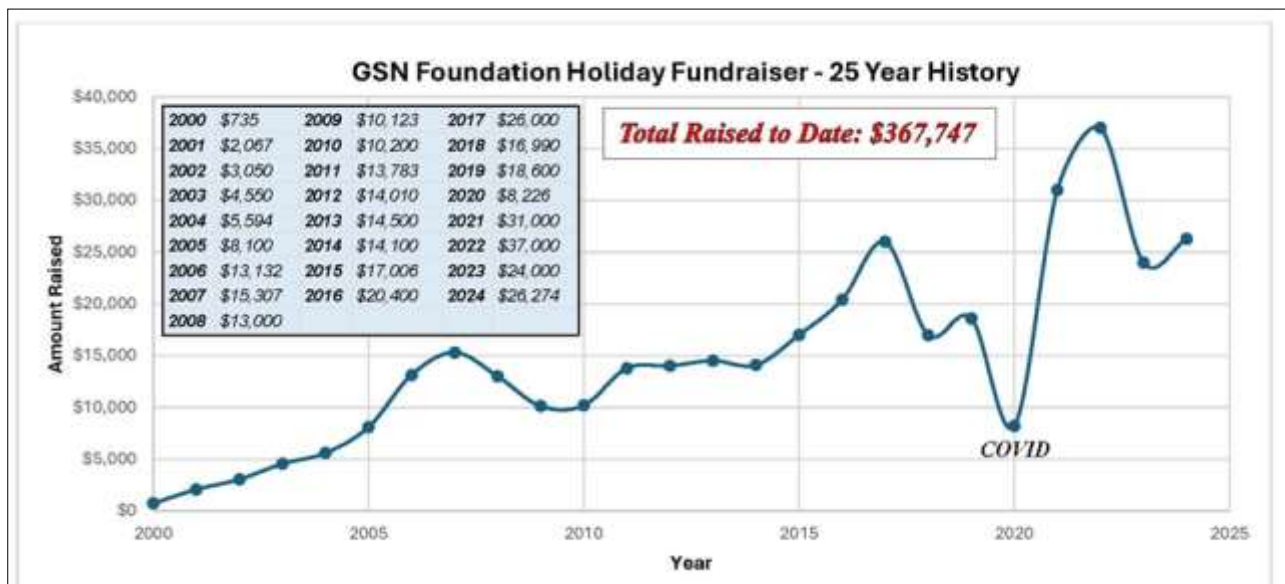
It is scholarship and grant application season! The Foundation has several well funded programs that support our mission of promoting earth science education. Guidelines and applications for our programs can be found at [www.gsnv.org/GSN Foundation](http://www.gsnv.org/GSN Foundation)

The GSN - D.D. LaPointe Scholarship is budgeted for **\$12,000** this year and aims to support UNR students studying mineral deposits in Nevada and desiring to work in the minerals industry. The GSN - Brian Morris Scholarship is budgeted for **\$7,500** this year and aims to support students at an accredited university studying exploration for or research on ore deposits, and who have a commitment to working in the minerals industry. The GSN - Great Basin Scholarship is budgeted for **\$12,000** this year and seeks to support students at an accredited university working on (non-resource/commodity based) fundamental geologic studies in the Great Basin.

The GSN – Chuck Thorman Geologic Mapping Scholarship is budgeted for **\$4,000** this year and seeks a student at an accredited university whose research project has a significant component of geologic mapping. **Application deadline for scholarships is May 31.**

The Earth Science Education Grants program is budgeted for up to **\$14,500** this year and has expanded its reach to include support for K-12 schools, community colleges and youth organizations desiring funding to help with field trips or classroom materials teaching about earth sciences. The UNR Field Camp Grants program is budgeted for **\$12,000** this year and seeks to support UNR students planning to attend field camp this year. **Application deadline for grants is March 31.**

That's **\$62,000** of available funding to support scholarships and earth science education in the schools in 2025. Please spread the word to your friends, relatives and associates who might be able to take advantage of these programs. Since its inception, the GSN Foundation, has donated almost **\$700,000** in its effort to promote earth science education. Please consider donating to these worthwhile programs! Our main fundraiser is the holiday party, and our success hinges directly on generous member donations.





## OTHER UPCOMING EVENTS

**February 3, 2025: Denver Region Exploration Geologist' Society (DREGS) monthly meeting.** CSM Metals Hall - Green Center, Green Center, Golden, CO. Speaker: Benedek Gál, Faraday Copper Title: Copper Creek, Arizona: Laramide Early Halo Style Porphyry and Breccia hosted Cu-Ag- Mo Mineralization. More information here: [DREGS Feb3](#)

**February 4, 2025 Arizona Geological Society Speaker Series 2025 in person or online.** Speaker: Mark Holland, Arizona Geological Survey. Title: "The ghost of sutures past: a re-evaluation of the Yavapai-Mazatzal province boundary in central Arizona". Streaming live: <https://tinyurl.com/AGS-4Feb2025-SpeakerSeries>. Click here for more information: [AGS Feb4](#)

**February 6, 2025: Nevada Petroleum & Geothermal Society meeting.** Speaker & Topic: Ormat Technologies: "All about Puna!", Ormat's Geothermal venture on the island of Hawaii. Reno, Nv. More information and to register: [NPGS Feb6](#)

**February 13, 2025: GSN Winnemucca Chapter Meeting.** The Martin Hotel, Winnemucca, NV. (See page 6)

**February 20, 2025: GSN Elko Chapter Meeting.** Western Folklife Center, Elko, NV. (See page 7)

**February 23-26, 2025: 2025 SME Annual Conference & Expo, Denver CO Convention Center.** Information and registration: <https://smeannualconference.org/>

**February 27, 2025: GSN So. Nevada Chapter Meeting.** Community Center, Beatty, NV. (See page 8)

**March 2-5, 2025: PDAC Annual Convention, Toronto, ON Canada.** Information and registration: <https://pdac.ca/convention-2025>. Visit GSN in the NEVADA booth in the NORTH Exhibit Hall!



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## Short Course on Structural Geology for Exploration and Mine Geologists

Dear Friends and colleagues:

The [Lowell Program in Economic Geology](#) and the [Arizona Geological Survey](#) are pleased to announce that we are opening registration for the 4rd offering of our Short Course on Structural Geology for Exploration and Mine Geologists, which will take place **March 16-25, 2025**.

This **10-day short course** is designed for **early-career professional geologists** and **graduate students**, as well as those wishing to strengthen their **structural geology skills**. It is led by **Carson A. Richardson** and **Eric Seedorff**, with significant contributions from economic and structural geologists from academia, government, and industry. Although mineralization and structures relevant to southwestern North America are emphasized due to their proximity, the course is applicable globally at scales from deposits and districts to regions.

The format includes **lectures**, **laboratories/desktop exercises**, and three days of **field trips** with mapping exercises. After two days of review of the fundamentals of structural geology, the course content will include crustal shorting (fold-and-thrust belts and basement-cored uplifts) with a one-day field trip, extensional deformation with two one-day field trips, strike-slip deformation, structures in specialized settings (e.g., volcanic and plutonic environments), structural settings of key mineral deposit types, and exploration targeting strategies.

The **course fee** is **\$3,700** for early registration (deadline February 21) and **\$3,900** for late registration (21 February to 07 March). Organizations receive a group discount of 15% for 4 or more registrants. The **course fee includes** course materials, transportation, and bag lunches for three days of field trips, one buffet lunch, and two dinners at the hotel, but it does not include room accommodations, transportation, or additional meals.

The principal venue is the Tucson Marriott University Park Hotel on the edge of the University of Arizona campus. Participants arrive at the hotel on Saturday, 15 March 2025, for a no-host mixer that evening. The course, including field trips, runs Sunday, 16 March, through a final dinner on Tuesday, 25 March, with departure on Wednesday morning, 26 March 2025. For a comprehensive description and important information regarding this short course, click [here](#).

To register, please complete [this form](#). If you have any questions or concerns, please contact [Rocio Brambila](#), Program Coordinator.

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# Mining Activity Update

DECEMBER 2024, Mike Brady

[LMBrady@aol.com](mailto:LMBrady@aol.com)

## NEVADA

Eminent Gold Ltd. announced that it acquired an option to earn a 100% interest in the Celts Property from Orogen Royalties Inc. for \$400,000 in cash and shares over 6 months. *Press Release: December 12*

Scorpio Gold Corp. announced that recent drill results at the Manhattan/Goldwedge Project include 41.1-55.1 meters @ 0.64 gpt Au (24MN-03) and 118.9-174.7 meters @ 1.69 gpt Au (24MN-09). (resource = 300,000 tonnes @ 10.58 gpt Au indicated) *Press Release: December 11*

McEwen Mining Inc. announced that reserves at the Gold Bar Mine aggregate 4,944,000 tonnes @ 1.0 gpt Au probable. (was 5,500,000 tonnes @ 0.95 gpt Au proven+probable) *2023 Annual Report*

Nevada King Gold Corp. announced that recent drill results at the Atlanta Project include 149.4-178.4 meters @ 1.34 gpt Au (AT23NS-173); 227.1-256.1 meters @ 1.95 gpt Au (AT23NS-177); 201.2-263.7 meters @ 1.05 gpt Au (AT23NS-183A) and 112.8-164.6 meters @ 1.21 gpt Au (AT24NS-189). (resource = 11,000,000 tonnes @ 1.3 gpt Au measured+indicated) *Press Release: December 9*

Sun Silver Ltd. announced that recent drill results at the Maverick Springs Project include 245.36-288.03 meters @ 59 gpt Ag, 0.21 gpt Au (MR24-200); 196.6-274.32 meters @ 16.1 gpt Ag, 0.08 gpt Au (MR24-201) and 315.47-350.52 meters @ 74.8 gpt Ag, 0.18 gpt Au (MR24-203). (resource = 195,735,000 tonnes @ 40.2 gpt Ag, 0.32 gpt Au inferred) *Press Release: December 18*

Borealis Mining Co. Ltd. announced that it offered to acquire Gold Bull Resources Corp. through a 0.93 share Borealis/1.0 share Gold Bull exchange basis. (resource @ Sandman = 18,550,000 tonnes @ 0.73 gpt Au indicated) *Press Release: December 9*

Integra Resources Corp. announced that recent drill results at the Wildcat Project include 132.3-146.0 meters @ 0.29 gpt Au (WCCD-13); 149.1-161.2 meters @ 0.22 gpt Au (WCCD-15); 99.8-313.6 meters

@ 0.25 gpt Au (WCCD-16) and 32.9-95.4 meters @ 0.52 gpt Au (WCCD-17). (resource = 59,873,000 tonnes @ 0.39 gpt Au indicated) *Press Release: December 12*

Viva Gold Corp. announced that recent drill results at the Tonopah Project include 88-99 meters @ 1.0 gpt Au (TG2412); 98-110 meters @ 0.3 gpt Au (TG2414) and 174-181 meters @ 3.3 gpt Au (TG2415). (resource = 16,204,000 tonnes @ 0.78 gpt Au measured+indicated) *Press Release: December 18*

Barrick Gold Corp.(61.5%) announced that reserves at the Carlin Open Pit Mine aggregate 105,700,000 tonnes @ 2.39 gpt Au proven+probable. (was 118,700,000 tonnes @ 2.27 gpt Au proven+probable) *2023 Annual Report*

Barrick Gold Corp.(61.5%) announced that reserves at the Carlin Underground Mine aggregate 27,640,000 tonnes @ 8.34 gpt Au proven+probable. (was 27,640,000 tonnes @ 8.79 gpt

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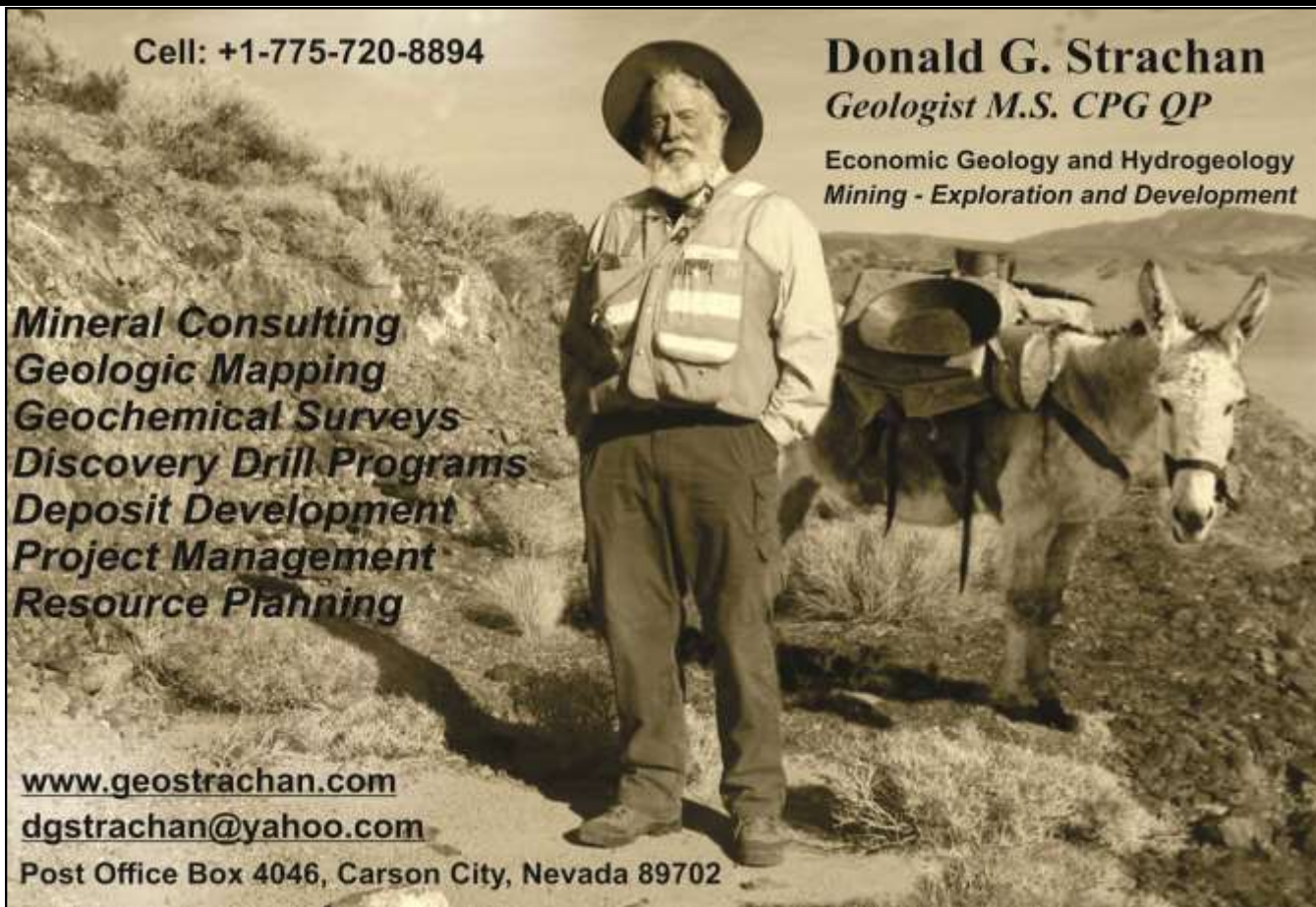


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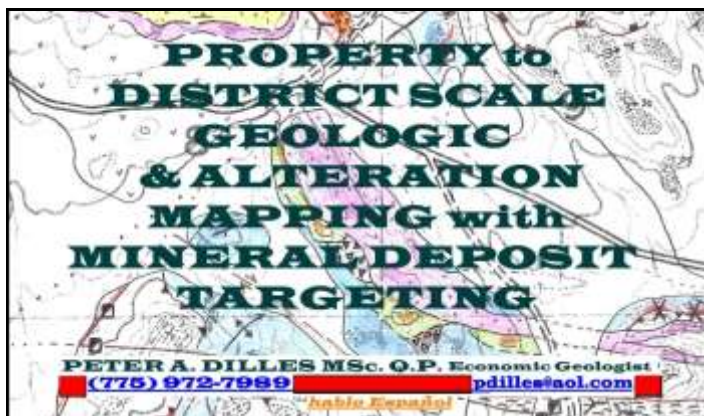
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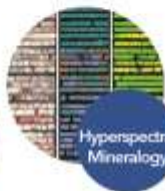
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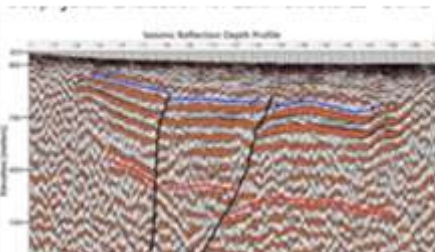
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GSN Executive Manager, Laura Ruud at Valley of Fire, NV on January 25, 2025. If you were on the GSN Fall 2014 field trip to southern Nevada, you may know exactly where in the park the photo on the right was taken! Win a GSN lapel pin if you know!