

EVOLUTION OF THE GEOLOGICAL SOCIETY OF NEVADA AND GOLD GEOLOGY CONCEPTS IN THE GREAT BASIN

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The first meeting of the Geological Society of Nevada was held the afternoon of December 9, 1957. During the past 50 years our Society evolved from small meetings in an upper room of the Mackay School of Mines building to a diverse group with three chapters, a foundation, well attended meetings, field trips, symposiums, and numerous special events. The evolution of the Great Basin gold industry also has humble beginnings. Three events supplied the starting point for where we are today; the USGS heavy metals program, the discovery of the Carlin gold deposit, and President Nixon closing the gold window.

GSN started as a discussion group meeting the third Friday afternoon of each month during the school year to consider geological ideas. The organization was more along the lines of the Geological Society of American, than the Society of Economic Geologists. Meetings consisted of a handful of members followed by refreshments and a discussion of the presentation. The desire to include "adult beverages" to stimulate discussions precipitated a move to the Stein Hofbrau on Sierra Street in downtown Reno in 1963. In concert with the growth in Nevada's mining and exploration industry in the late 1970s the Society's membership exploded. Meetings were held at several locations as attendance grew until the move to the Reno Elks Club in September 1996. The first GSN field trip was to Alligator Ridge in September 1981, with the first published guidebook accompanying the fall 1984 trip to Pinson, Florida Canyon, Rochester, and Relief Canyon. Field trips were expanded to the two a year format in 1988. The symposium series evolved from the initial 1987 meeting by yet another local geological group with a one volume proceeding publication into a must attend event with a highly regarded publication. Along the way, special events have become integral parts of the organization such as the family picnic, golf tournament, and Doug Silver series. The Society expanded to include chapters in Elko, Winnemucca, and Las Vegas, and the GSN Foundation.

Growth in Great Basin mining and exploration paralleled an expansion of the understanding of gold deposit geology that can be traced in part through the articles and presentations at the Society. The initial paper on Carlin in the 1968 AIME Graton-Sales Volumes produced several misconceptions about windows through the upper plate of the Roberts Mountain thrust fault, Roberts Mountains Formation, and the thrust itself as exploration guides. As fine-grain disseminated gold deposits were discovered in other geologic environments it became clear that host rock and structure were more important than the Roberts Mountains Formation and the Roberts Mountain thrust. During the 1980s gold was also discovered in a variety of volcanic rocks, hot springs deposits, along detachment(?) faults, and in epithermal veins. Greater exposure of gold deposits through mining presented the opportunity to map and sample, developing more detailed information of processes in and origins of gold deposits. As the easily discovered gold systems were explored in the mountain ranges of the Great Basin exploration moved onto the surrounding pediments and into the basins. New research was undertaken on geophysical, remote sensing, and geochemical techniques that assisted in making discoveries. GSN meetings were commonly the venue where these new ideas could be presented.