

Lake George Gem & Mineral Club

Club News

February, 2020



NOTE: LGGM Club meetings in October through March will start at 10:00 a.m.

Program for the Month: Saturday, February 8, 2020 10:00 a.m.

The Greater Alma Mining District: A Colorado Mining Legend

Presented by **Steven Veatch**



The first gold strike in Park County, Colorado was on the eastern slope of the Mosquito Range in the northwest part of the county at Buckskin Gulch in 1859—the same year the “Piles Peak or Bust” gold rush started. This remote area of mountains, streams, and forests was still part of Kansas Territory when several mining camps were established. The Greater Alma Mining District included the Alma Placers, Montgomery, Buckskin, Horseshoe, Mosquito, and the Pennsylvania subdistricts. The extremes of the landscape presented harsh conditions to those who came to mine gold, silver, and other valuable mineral deposits. People came and established frontier mining districts, built towns, and created roads and rail routes. All this activity, combined with other mining camps in the region, accelerated the settlement of the West and made major contributions to the economic growth of Colorado. Steven Veatch will tell this story with rare historical photos, stunning photography, and incredible mineral photos. Do not miss this presentation. This presentation is based on the work of the Lake George Gem and Mineral Club study group.

SCHEDULE OF LGGM CLUB PROGRAMS, FIELD TRIPS & EVENTS

Date(s)	What	Where	Leader/Notes
Jan 1-Mar 31	Membership applications are due.		
Feb 8 10:00am	Alma Gold	LGGM Club Presentation	Steven Veatch
Mar 14 10:00am	Collecting Chalcedony at Saddle Mountain, AZ	LGGM Club Presentation	Bob Baker
Mar 28 10:00-2:00	Mineral Identification Class	Florissant Library	Bob Carnein
April 4 10:00-2:00	Rockhounding 101	Lake George Comm. Ctr	John Rakowski
A special extra date and an annual class always looked forward to.			
Apr 11 9:00am	Rise of the Mammals	LGGM Club Presentation	Corral Bluffs Alliance
May 9 9:00am	Filing Claims & Recent Finds	LGGM Club Presentation.	Joe Dorris
July 11 9:00	North Star Mine and Turquoise	LGGM Club Presentation	Clint Cross
TBD	Rare Earth Minerals	LGGM Club Presentation	Phil Persson
Possibly	Birds – Living Relatives of the Dinosaur	LGGM Club Presentation	Paul Combs
Presentations and Field Trips for 2020 will be added to in future newsletters after they are confirmed.			

The following two free classes will complement each other:

Mineral ID Class is a GO! Bob Carnein reports that, as of the end of January, we have 12 people enrolled in his "Mineral Identification" class. The 4-hour class will be held at the Florissant Library on March 28 and will include an introduction to some simple tools and observations that help in the identification of many common minerals. The free class can accommodate up to 25 members, and students 12 and over are welcome, if accompanied by an adult. For more information or to enroll, contact Bob at ccarnein@gmail.com or 719-687-2739.

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Rockhounding 101 On Saturday, April 4, 2020, at 10:00 AM, at the Lake George Community Center, Vice President **John Rakowski** will present rockhounding basics for our area and a good review of how to recognize the formations, the minerals, and how to extract them. Beginning tool selection and safety tips will be discussed along with tool suggestions for more serious collectors. Examples of minerals and tools will be available. This may be a repeat for many club members but this is an excellent introduction for new folks in the hobby or new to collecting in this area.

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Tentative LGGM Club Events:

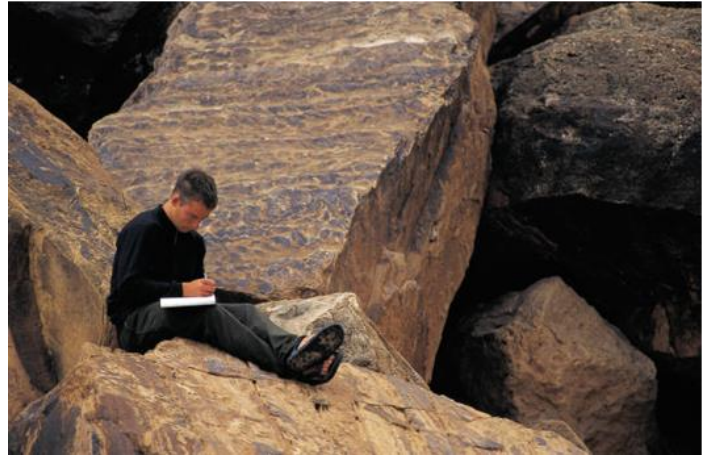
Bob Carnein canceled his Central Colorado Geology field trips last fall because only a half dozen people signed up. He will try to re-schedule the trip on two separate weekdays or weekends sometime this spring. He notes that he needs to have at least 10 registrants to justify all of the preparation involved.

Jerrolynn Kawamoto will offer one or more 4-hour classes in Basic Wire Wrapping of cabochons this spring (tentatively on weekends in March or April.) If you are interested in attending one of these classes, please contact Jerrolynn by email at jerrolynn@wildblue.net.

COMING EVENTS OUTSIDE THE LGGM CLUB:

Science Writing: Pathways to Discovery

Are you ready to take your science, nature, and other types of nonfiction writing to the next level? The Western Museum of Mining and Industry provides an intimate, inclusive writing program in a striking setting. Immerse yourself in this intensive winter writing class designed for those who want to learn more about nonfiction writing and publishing. Topics will include writing research papers, articles for magazines and newspapers, advanced research methods, and the use of illustrations and images.



Writing about science, nature, mining, history, and other nonfiction subjects offers exciting opportunities to be published. Magazines, newspapers, bloggers, clubs, and schools are looking for articles to share with their audience, and this class can teach you how to publish. This class combines excellent instruction with valuable resources and is appropriate for nonfiction writers of all genres and levels. Students in middle and high school are encouraged to attend.

LEARN about the scope of nonfiction;
DISCOVER writing techniques and tips; and
EXPLORE powerful writing strategies through the science and nature examples.

Location: Western Museum of Mining
225 North Gate Blvd,
Colorado Springs, CO 80921

Date: February 22, 2020

Time: 8:30am-5:30pm

Instructor: Steven Veatch

Call: 719-488-0880 to reserve your spot today

Fees:

- **Registration Fee:** Adults \$90, students \$65 (includes a morning reception of coffee and donuts plus lunch will be provided). **MEMBERS OF THE LGGMC WILL RECEIVE A 50% DISCOUNT ON THE REGISTRATION FEE.**
- **Optional graduate credit:** This class is perfect for teachers K-12 (recertification credits: 0.5 semester credit hour available through the Colorado School of Mines for additional fee (\$40.00) payable at start of the class).

Instructor bio: Steven Veatch Steven Veatch grew up in the Pikes Peak region and earned degrees at Pikes Peak Community College, Colorado State University at Pueblo, Webster University, and



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Emporia State University. He is a writer of essays, literary criticism, book reviews, science articles, and professional papers. He has published over 150 articles on nature and science. He has contributed chapters to these three books: *Field Trips in the Southern Rocky Mountains, USA, Field Guide 5*; *The Paleontology of the Upper Eocene Florissant Formation, Colorado*; and *The World's Greatest Gold Camp: An Introduction to the History of the Cripple Creek and Victor Mining District*.

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OTHER COMING EVENTS OUTSIDE THE LGGM CLUB: (Nearby gem, mineral, fossil and geology events that you may enjoy.)

- **Cañon City Geology Club**, meets on the 2nd Monday of the month at 6PM in the United Methodist Church, Cañon City
- **Columbine Gem & Mineral Society**, meets on the 2nd Thursday of each month, 6:30PM in the meeting room, Mt. Shavano Manor, 525 W. 16th (at J St.), Salida
- **Colorado Springs Mineralogical Society**, meets on the 3rd Thursday of each month at 7PM in the Mt. Carmel Veteran's Service Center, 530 Communication Circle, Colorado Springs;
- **Pueblo Rockhounds**, meets on the 3rd Thursday of each month at 6:30PM in the Westminster Presbyterian Church, 10 University Circle, Pueblo.

Pete Modreski suggests the following upcoming events:

Tues., Feb. 4, 10:30-11:30 a.m., USGS Rocky Mountain Science Seminar, **Exploring the mechanics of our retreating Arctic coastline**, Dr. Matt Thomas, U.S. Geological Survey. Building 25 auditorium, Denver Federal Center, Lakewood CO.

Feb. 13-16, 66th Annual Tucson Gem and Mineral Show, sponsored by the Tucson Gem and Mineral Society (TGMS), Tucson Convention Center, Tucson, AZ. "The main show" in Tucson; other, commercial shows, in the city are open beginning January 26, or earlier.

Sun, Feb. 16, noonish, at the monthly FSS (Florissant Scientific Society) meeting, Jay Temple (geologist) and Jennifer Heiny (Garden of the Gods Visitors Center, I think) will give a presentation "**Behind the Scenes at Garden of the Gods**", followed perhaps by a short field trip. Meeting place and exact time TBD. All are welcome to attend—the FSS has no formal membership, other than an email list of persons interested in geology. Contact Beth Simmons, cloverknoll@comcast.net, for details or to be put on the FSS mailing list.

Tues., Feb. 18, 10:30-11:30 a.m., USGS Rocky Mountain Science Seminar, **Global metal resources; land of plenty or are we running out?**, Dr. Simon Jowitt, University of Nevada, Las Vegas.
Building 25 auditorium, Denver Federal Center, Lakewood CO.

Tues., Feb. 18, 3:00 p.m., DMNS Earth Sciences Colloquium, **Last gasp of the Cretaceous: Insights from North Dakota**, Clint Boyd (North Dakota Geological Survey)

Thurs., Feb. 20, 7:00 p.m., **Petrologic evolution of Platoro magmatic system after the eruption of the Chiquito Peak Tuff, San Juan Volcanic Locus, Colorado**, by Amy Gilmer, US Geological Survey.

Monthly meeting of the Colorado Scientific Society, Berthoud Hall Room 241, Colorado School of Mines campus, Golden; all are welcome; social time & refreshments at 6:30, meeting at 7:00.

Fri.-Sat.-Sun., Feb. 28-Mar. 1, Denver Gem & Mineral Guild, Jewelry, Gem, and Mineral Show, Jefferson County Fair Grounds, 15200 W. 6th Ave., Golden, CO. Free parking & free admission; hours 10-6 Fri. & Sat., 10-5 Sun.

Thurs., Mar. 12, 7:30 p.m., bimonthly meeting, Friends of Mineralogy, Colorado Chapter, featuring Scott Werschky, Reno, NV, mining geologist, mineral dealer (Miner's Lunchbox, specializing in gold specimens and "investment quality mineral specimens"), and board member of the Rice Museum of Rocks and Minerals. Presentation topic TBA. Berthoud Hall Room 108, Colorado School of Mines campus, Golden. See <https://friendsofmineralogycolorado.org/> for more info when available.

Fri., Mar. 13, North Jeffco Gem & Mineral Club Silent Auction, APEX Community Center, 6842 Wadsworth Blvd., Arvada, setup at 5:30 p.m., auction begins at 6:45 p.m. All are welcome. For more info, Bill Jones, 303-503-6288, email sidewindermin@comcast.net.

Fri.-Sat.-Sun., Mar. 13-15, Fort Collins Gem & Mineral Show; at Thomas M. McKee Building, at The Ranch/Larimer County Fairgrounds, 5280 Arena Circle, Loveland, CO (I-25 exit 259); hours 4-8 Fri., 9-6 Sat., 10-5 Sun.; adult admission \$4. Sponsored by the Fort Collins Rockhounds Club.

Thurs., Mar. 19, 7:00 p.m., Colo. Sci. Soc. Monthly meeting, **2019 Colorado Avalanches: A case history of destruction in Hinsdale County, impacts to historic mining dams, and how snow avalanches may influence development of rock glaciers**, by Jonathon Lovekin, Colorado Geological Survey. Berthoud Hall Room 241.

Fri.-Sat.-Sun., Apr. 10-12, Colorado Mineral and Fossil Spring Show, Crown Plaza Hotel - Convention Center, 15500 E 40th Ave., Denver, Colorado, 10-6 Fri. & Sat., 10-5 Sun., free parking & admission.

Thurs., Apr. 16, 5:30 p.m., **Rise of the Mammals: Exceptional Continental Record of Biotic Recovery after the Cretaceous–Paleogene Mass Extinction** (about the Corral Bluffs fossil mammal find), by Ian Miller and Tyler Lyson, Denver Museum of Nature and Science; at the **CSS Annual Past Presidents' Dinner**, to be held at the **Mount Vernon Canyon Club**

Sat., May 16, noon-4 p.m., **Silent Auction, sponsored by Colorado Chapter, Friends of Mineralogy**. All are welcome; setup at 11, auction begins at noon, live auction at 1 p.m. At a new location: Wheat Ridge United Methodist Church, 7530 W. 38th Ave., Wheat Ridge (38th Ave. at Wadsworth Blvd.).

Sat., May 16, 2020 Symposium on Water and Energy, to be held in Ricketson Auditorium, Denver Museum of Nature and Science. Cosponsored by the Colorado Scientific Society, Denver Museum of Nature & Science, Center for the American West, and others. Details forthcoming!

Sun, May 17, noonish, for the monthly FSS (Florissant Scientific Society) meeting, Christine Siddoway (Colorado College) will give a talk on the **Tava Sandstone** (the geologically famous "sandstone injectite dikes of the Pikes Peak region") followed by a short field trip. Osborne Center, University of Colorado at Colorado Springs. All are welcome to attend; contact Beth Simmons, cloverknoll@comcast.net, for details or to be put on the FSS mailing list.

Fri.-Sat.-Sun., June 12-14, Pikes Peak Gem & Mineral Show, Norris-Penrose Event Center, 1045 Lower Gold Camp Road, Colorado Springs, CO 80905. Sponsored by the Colorado Springs Mineralogical Society. Hours: noon-7 pm Fri., 10-5 Sat, 10-4 Sun. Adult admission \$5.

Thurs.-Sun., July 23-26, Fairplay Contin-Tail Gem, Mineral, and Jewelry Show, Fairplay River Park.

Thurs.-Sun., Aug. 6-9, Buena Vista Contin-Tail outdoor gem and mineral show, Buena Vista Rodeo Grounds. Colorado's longtime famous and best attended tent & tailgate rock swap and show.

Fri.-Sun., Aug. 14-16, Lake George Gem and Mineral Show, sponsored by the Lake George Gem and Mineral Club. Also taking place nearby "down the road" is the **Woodland Park Rock, Gem and Jewelry Show**, Aug. 13-16.

Fri.-Sun., Sept. 18-20, 53rd Annual Denver Gem and Mineral Show, at the Denver Mart. 2020 theme is "Fabulous Fluorite".

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For more lecture series during the year see:

Colorado Café Scientifique in Denver, monthly lectures on science topics held either at Blake Street Station or Brooklyn's, Denver; open to the public, no charge other than refreshments you may choose to purchase; see <http://cafescicolorado.org/> .

Colorado Scientific Society (3rd Thursday, 7 p.m.), see <http://coloscisoc.org/> . Meets at Berthoud Hall Room 241, CSM campus, Golden, except when noted otherwise.

CU Geological Science Colloquium (Wednesdays, 4 p.m.)

see <http://www.colorado.edu/geologicalsciences/colloquium>

CSU Dept. of Geoscience Seminars (Fridays, 4 p.m.),

see <https://warnercnr.colostate.edu/geosciences/geosciences-seminar-series/>

Van Tuyl Lecture Series, Colorado School of Mines, (Thursdays, 4

p.m.): <https://geology.mines.edu/events-calendar/lectures/>

Denver Mining Club (Mondays, 11:30), see <http://www.denverminingclub.org/> .

Denver Museum of Nature and Science, Earth Science Colloquium series, 3:00-4:00 p.m., VIP Room unless noted, meeting dates and day of the week vary. Museum admission is not required; see <http://www.dmns.org/science/research/earth-sciences/>

Denver Region Exploration Geologists Society (DREGS); usually 1st Monday, 7 p.m., Room 241 Bethoud Hall, CSM campus, Golden; <http://www.dregs.org/index.html>

Florissant Scientific Society (FSS); meets monthly in various Front Range locations for a lecture or field trip; meeting locations vary, normally on Sundays at noon; all interested persons are welcome to attend the meetings and trips; see <http://www.fss-co.org/> for details and schedules.

Friends of Mineralogy, Colorado Chapter, usually meets on the 2nd Thursday of odd-numbered months, 7:30 p.m., Berthoud Hall Room 108, CSM campus, Golden; see <https://friendsofmineralogycolorado.org/>.

Golden Beer Talks (2nd Tuesday, 6-8 p.m.), at the Buffalo Rose, 1119 Washington Ave., Golden. Doors open at 6; Talk begins at 6:35; Intermission – 7-7:15; Q&A/clean up 7:15-8. "Golden's grassroots version of TED talks, Expand your mind with a beer in your hand", <http://goldenbeertalks.org/>

Nerd Night Denver is a theater-style evening featuring usually 3 short (20-minute) TED-style talks on science or related topics; held more-or-less monthly at the Oriental Theater, 4335 W. 44th Ave., Denver; drinks are available; for ages 18+. Admission is \$6 online in advance, \$10 at the door.

See <https://www.nerdnitedenver.com/> .

Rocky Mountain Map Society (RMMS; Denver Public Library, Gates Room, 3rd Tuesday, 5:30 p.m.), <http://rmmmaps.org/>

Western Interior Paleontological Society (WIPS); beginning January 2020, WIPS will meet on the 1st Monday of the month, 7 p.m., in Petroleum Hall, Green Center, 924 16th St., Colorado School of Mines campus, Golden See <http://westernpaleo.org/> .

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LGGM Club News:

Membership Applications:

Membership applications for 2020 must be received between January 1st and March 31st. Although non-members are welcome to attend the educational programs at the monthly meetings, you must be a member to participate in any field trips with the club. Go to <http://lggmclub.org/> Be a Member to sign up.

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Request for Specimens:

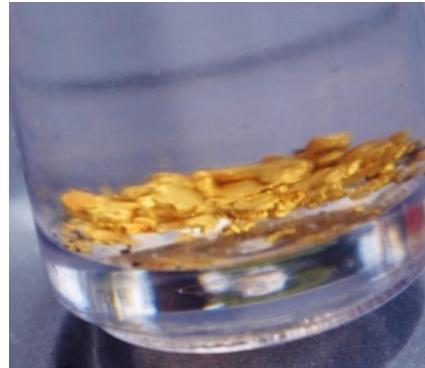
Our Annual Show Committee would like to request that all members who have small rock and mineral samples that they are willing to share bring them to any of our monthly meetings before our show in August. These specimens will be used for our kids' activities. Update - The Publicity Committee (Gail Campbell/Chair) will be seeking new signage locations for our show, and we WILL have postcards this year for advertisement distribution. We hope to have these postcards ready by our February or March meeting. The Committee is also looking for a KIDS Activities Chair or Co-Chair. Please contact Carol Kinate at kinatec@aol.com if interested.

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Frank and Ellie Rosenberg sent us the following information and photos of their recent travels:

“For the last few days we have been hunting Gold in Ballarat, one of the old mining towns in Victoria (Gold was discovered there in 1851 and Ballarat was declared a town in 1852).

We found gold, not by use of our metal detector, but by panning and with the help of a local prospector who led us in the right direction. Thank you! We are still working on finding our first nugget with our metal detector.”



Links to Interesting Geological Articles Online:

From **Bob Carnein** we have the following links:

Here's an interesting article about how the eruption of the Deccan traps probably didn't cause the K-T mass extinction of dinosaurs.

https://www.sciencenews.org/article/volcanic-gas-bursts-probably-didnt-kill-off-the-dinosaurs?utm_source=Editors_Picks&utm_medium=email&utm_campaign=editorspicks01

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An Overview of Minerals Toxicity"

<https://www.mineral-forum.com/message-board/viewtopic.php?SRC=Y2Nhcm5laW5AZ21haWwuY29t&p=69535#69535>

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Here's an article about a topic one seldom reads about--extremely successful women in the mining industry.

[https://www.newyorker.com/magazine/2020/02/03/the-woman-shaking-up-the-diamond-industry?utm_campaign=aud-](https://www.newyorker.com/magazine/2020/02/03/the-woman-shaking-up-the-diamond-industry?utm_campaign=aud-dev&utm_source=nl&utm_brand=tny&utm_mailing=TNY_Magazine_Daily_012720&utm)

[dev&utm_source=nl&utm_brand=tny&utm_mailing=TNY Magazine Daily 012720&utm](https://www.newyorker.com/magazine/2020/02/03/the-woman-shaking-up-the-diamond-industry?utm_campaign=aud-dev&utm_source=nl&utm_brand=tny&utm_mailing=TNY_Magazine_Daily_012720&utm)

From **Wayne Orlowski** we have the following links:

What is Agate?

http://www.geologypage.com/2020/01/types-of-agate-what-are-the-different-types-of-agate.html?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+geology-page+%28Geology+Page%29

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This older article includes spectacular photos of a giant nephrite jade find in Canada:

http://www.geologyin.com/2016/12/the-giant-nephrite-jade-road-in-canada.html?fbclid=IwAR2jtaZa4ghcZtdrrMTmH9h4R_mHiX2yEFLBq-6HewcA_JJ257mRVdjQ52w&m=1

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Minnesota's banded iron ore:

https://www.rockngem.com/rock-science-minnesotas-banded-iron-ore/#utm_source=newsletter&utm_medium=email&utm_campaign=rg_newsletter010920

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In Upstate New York, Ancient Arthropods Can Get Turned Into (Fool's) Gold

https://www.atlasobscura.com/articles/pyrite-trilobites-upstate-new-york?utm_source=Atlas+Obscura+Daily+Newsletter&utm_campaign=20cbcc83f5-EMAIL_CAMPAIGN_2020_01_07_Not_NYC&utm_medium=email&utm_term=0_f36db9c480-20cbcc83f5-63289333&mc_cid=20cbcc83f5&mc_eid=4c09dd6067

This article on forgotten feldspars should be particularly relevant for our area.

https://www.rockngem.com/the-sometimes-forgotten-feldspar/?utm_source=newsletter&utm_medium=email&utm_campaign=rg_newsletter012320

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The latest installment of "**Bench Tips**" by **Brad Smith**: (www.BradSmithJewelry.com)

CUTTING MOLDS

Cutting molds is easier and more precise with a sharp blade. A new Xacto blade is sufficient for cutting RTV molds but is usually not sharp enough for vulcanized rubber. For that it's best to use scalpel blades available from most jewelry supply companies. The #11 blade is triangle shaped, and the #12 is hawksbill shaped. I find the hawksbill is particularly nice for cutting the registration keys of the mold.



USING YOUR THUMB

When using multiple bits in a Foredom, we often have to deal with different shaft sizes - the usual 3/32 inch burs, the larger 1/8 inch shafts sizes and of course the many different sizes of twist drills. For some reason I really dislike having to turn the key multiple times to open or close the jaws of the handpiece chuck. So I have two ways to speed up that task. For opening up the jaws, I just remember "four", the number of turns I have to make to open the chuck just enough from the 3/32 bur shaft size to the larger 1/8 bur shaft size.

For closing the jaws around a smaller shaft, there's a neat trick. Hold the new bit in the center of the open jaws of the chuck, put your thumb lightly onto the outer toothed collar of the chuck, and gently start up the Foredom. As the chuck turns, it will naturally tighten the jaws around the bur shaft or the drill bit. Then all you have to do is a final tightening with the key.



Work Smarter With Brad's "How To" Jewelry Books
www.Amazon.com/author/bradfordsmith

Happy hammering,
- Brad

Notes from the Editors

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The Miner's Photograph: A Pathway to the Past

By Steven Wade Veatch

This photograph, taken around 1899, shows my ancestors posing at their modest frame home where they lived one step away from Cripple Creek's gold rush world of cardplayers, whiskey drinkers, and midnight carousers. The scene depicts my great-grandfather (Robert Pickering Plews), my great-grandmother (Janet Plews), and two of their daughters in front of their miner's cabin, built from pine boards, on a hillside in the newly established mining town of Elkton, Colorado.



Robert Plews (32), with two daughters, Elizabeth (4) and Mabel (3) and his wife Janet (25), stand in front of their small home in Elkton, Colorado, one of the towns in the Cripple Creek Mining District. Photo date circa 1899, from the S. W. Veatch

My great-grandparents were from England. Two years after my great-grandfather married my great-grandmother, he left England—by himself—to build a better life in Cripple Creek's goldfields for the family that he left behind.

Robert Plews was a hope-chaser. He carried his dreams from England across the Atlantic and then 1,700 miles to the Front Range and Cripple Creek. He arrived in the gold mining district in 1897. Victoria was the Queen of England, William McKinley was the US President, and Marconi had sent his first wireless transmission. The Colorado Rockies meant a new chance for him at a place with unlimited opportunities. He went to work at the busy Elkton mine. After my great-grandfather established himself in the mining camp, he sent for his wife, and two daughters, Elizabeth and Mabel, who were still in England. They left Newcastle, England in 1899 and immigrated to Elkton.

I discovered this photograph recently, tucked away in an old box. I am drawn to this image's simple charm. It's a staged scene: the family hired a photographer, dressed up, and posed for the camera. And, it would not have been an inexpensive endeavor at the time. The photo is an affirmation of their place and position in society. My great-grandparents wanted to preserve this sense of success in a new country. In the photograph, the modest home in the mining camp is a tidy place. My great-grandfather raised six daughters there. A seventh daughter later grew up in Cañon City, Colorado. Great-grandfather Plews was the strict English father of legend, who made all of his daughters behave at a time when children were to be seen and not heard.

In stark contrast to the rustic cabin, everyone is dressed as if they came from a holiday party, not a rough-and-tumble mining camp. The clothes are stylish and expensive. My great-grandfather is smartly attired. A simple watch fob hangs out of a pocket of his waistcoat. He wears sleeve garters on his ready-made shirt. Shirts in those days came in only one sleeve length; and the garters allowed him to adjust the sleeve so that the cuffs were the correct length. My great-grandmother's long dark dress covers her high-button shoes. She covers her abdomen with her hand and arm, as did many women of the day who were pregnant. She was pregnant with my great-aunt Emma. The two young girls, newly arrived from England, are in white dresses. One has ribbons in her hair.

According to my grandmother, my great-grandfather satisfied his hunger for learning by reading books late into the night, some of which were about mining. His hunger for education resulted in several promotions at the Elkton mine. He eventually became the hoist operator there. While he worked at the mine, the shafts sank lower and lower and the horizontal drifts dug deeper into the rich goldfields while tailings piled up on the surface. My great-grandfather worked at the Elkton mine for 21 years.

This photograph is a path for me into my past. I can connect with my great-grandfather and imagine his days of mining, and how that work somehow reached through several generations to me, explaining, in part, my interest in mining and geology from an early age. I can envision how my great-grandmother baked, cooked, cleaned, and sewed for a family of nine. And I think of their lives, deeply lived in Colorado's last gold rush.

Today, the cabin is no longer there; modern gold mining operations replaced it and the town of Elkton. Yet, everything my great-grandfather created there would live on through his seven girls, their children, and beyond. I am a direct descendant of one of his daughters, and remain deeply rooted to the Cripple Creek Mining District.

Monthly Mineral Quiz



Last Month's Mineral. Erythrite, $\text{Co}_3(\text{AsO}_4)_2 \cdot 8\text{H}_2\text{O}$, is a showy secondary mineral that occurs as thin crusts and crystals in cobalt deposits, such as Cobalt, Ontario (source of the specimen to the left). It is sometimes called "cobalt bloom", and, where nickel is present, it may occur with a similar though seldom showy green mineral annabergite ("nickel bloom"). Superb specimens with well formed monoclinic crystals come from the Bou Azzer mining district, Morocco. Its hardness is 1.5-2.5, specific gravity is about 3, and it has perfect cleavage. However, none of these properties are easy to observe, and its color (bubblegum pink to purplish red), along with associated minerals, are often the most useful properties for the beginner.

(Carnein specimen and photo)



February's mineral: left to right, Specimens from Mexico, Arizona, and Morocco (Carnein specimens and photos)

This Month's Mineral. Here's another showy mineral that occurs as superb specimens in Morocco. These are so abundant that anyone with even a modest budget can afford a piece that will knock the socks off of someone unfamiliar with it. Specimens occur in various colors but mainly red, orange, or yellow. This color variation results from substitution of arsenic or phosphorous for the cation from which the mineral derives its name (that's a hint!). Vitreous hexagonal crystals are very common (in fact, one rarely sees massive specimens), and the specific gravity, at near 7, reflects the fact that this mineral forms from the alteration of galena in the oxidized zone of mixed sulfide deposits. Uncommon in Colorado, this mineral occurs mainly as inconspicuous crusts and crystals in Lake, Montrose, and Summit counties. What is it?



The Lake George Gem and Mineral Club is a group of people interested in rocks and minerals, fossils, geography and history of the Pikes Peak/South Park area, Indian artifacts, and the great outdoors. The Club's informational programs and field trips provide opportunities to learn about Earth science, rocks and minerals, lapidary work and jewelry making, and to share information and experiences with other members. Guests are welcome to attend, to see what we are about!

The Club is geared primarily to amateur collectors and artisans, with programs of interest both to beginners and serious amateurs. The Club meets on the second Saturday of each month at the Lake George Community Center, located on the north side of US Highway 24 on the east edge of town, sharing a building with the county highway shops. **In the winter, we meet at 10:00AM. From April through September, we meet at 9:00AM, to allow more time for our field trips.**

Our organization is incorporated under Colorado law as a nonprofit educational organization, and is a member of the Colorado, Rocky Mountain, and American Federations of Mineralogical Societies. We also sponsor an annual Gem and Mineral Show at Lake George, where collectors and others may purchase or sell rocks, minerals, fossils, gems, or jewelry. Annual membership dues (Jan. 1 through Dec. 31) are \$15.00 for an individual (18 and over), and \$25.00 for a family (parents plus dependents under age 18). New memberships and renewals are only accepted Jan 1 through March 31 each year.

Our Officers for 2020 are:

Richard Kawamoto, President
7584 Cedar Mountain Rd.
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