

THE BULLETIN OF THE COLORADO SPRINGS MINERALOGICAL SOCIETY Published Since 1960

Colorado Springs
Mineralogical Society
Founded in 1936
Lazard Cahn
Honorary President
June 2019
PICK & PACK
Vol 59 Number 5

CSMS General Assembly

Thursday, June 20, 7:00 PM

Speaker: Amber Sanderson

Topic: "Staking Unpatented Mining Claims on Federal Land"

Please note: Members whose names begin with M-Z are responsible for refreshments in May

****In case of inclement weather please call**
Mt. Carmel Veteran's Service Center 719 309-4714**

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Photo courtesy of Chris Graham

JUNE PROGRAM

Amber Sanderson has been working as a geologist for the Bureau of Land Management (BLM) in Cañon City since 2018 and has been an earth sciences teaching assistant since 2013. Pictured at left, Sanderson explains the importance of mining operations - from locating a deposit to reclamation - to a young but enthralled audience at the Royal Gorge Regional Museum and History Center last year. Amber is currently working on her Master's degree at Northern Illinois University studying certain subduction zone processes relating to high temperature isotope geochemistry.

COLORADO SPRINGS MINERALOGICAL SOCIETY PO BOX 2 COLORADO SPRINGS, COLORADO 80901-0002

CSMS Calendar

June & July 2019

- Thu. **Jun 6, Jul 6** ----- **Board Meeting** 7p.m., Pikes Peak United Methodist Church
- Tue. **Jun 4, Jul 2** ----- **Fossil Group** 7p.m., Methodist Church, Jerry Suchan, 303 648-3410
- Thu. **Jun 20, Jul 18** ---- **Pebble Pups, Jrs.** 5:30p.m., Mt. Carmel Ctr., Steve Veatch, 719 748-5010
- Thu. **Jun 20, Jul 18** ---- **General Assembly** 7p.m., Mt. Carmel Center
- Thu. **Jun 27, Sep 26** ---- **Crystal Group** 7p.m., Mt Carmel Ctr. Kevin Witte, 719 638-7919
Faceting Group Will resume meeting in September, Bill Massie
- Appointment Only ---- **Jewelry Group** Bill Arnson, 719 337-8070
- Appointment Only ---- **Lapidary Group** Sharon Holte, 719 217-5683

For more information on any of the sub-groups, meetings, and other CSMS valuable information, go to our website: www.csms1936.com

Upcoming Events of Interest to CSMS Members

Submitted by Pete Modreski

Calendar of Coming Events

Unless as noted, all of these societies' and institutions' lecture series are free and open to the public:

Tues.-Wed.-Thur., June 4-6, Two rock and mineral + geology classes for educators, with registration and teacher recertification credit through the Colorado School of Mines Teacher Enhancement Program. See <https://te.csmspace.com/register.php>, Summer 2019 courses, for **Rocks & Minerals, June 4-5**, CT-9666-19D, fee \$110, 1.0 credit hour; and **Walking Tour of Building Stones in Denver, June 6**, CT-04131-19D, fee \$80, 0.5 credit hour; plus many other classes available through CSM. One of the other classes is **Dinosaur Ridge Teacher's Workshop, July 9-10**, CT-9206-19M, fee \$125, 1.0 credit hour.

Wed., June 5, 3:00 p.m., Denver Museum of Nature & Science, Earth Sciences Colloquium, "**Deciphering dinosaur lives: From microscopes to Madagascar**"; by Kristi Curry Rogers, Macalester College. In Ricketson Auditorium (not in VIP Room) DMNS; all are welcome, museum admission is not required.

Mon., June 10, 3:00 p.m., Denver Museum of Nature & Science, Earth Sciences Colloquium, "**Cursed seashells: Deciphering one of the most ubiquitous Paleozoic fossils, Rafinesquina**"; by Ben Dattilo, Purdue University. In Community Room (3rdFloor), not in VIP Room, DMNS; all are welcome, museum admission is not required.

Sat., June 15, 12:00-3:00 p.m. **Colorado School of Mines Geology Museum: Sale of Microscopes** The microscopes are all photographed and posted to the Facebook event. The inventory is attached and the link to the Facebook page follows. Friends of the Museum and Volunteers will get an additional 20% off of the asking price. Anyone interested in more information or additional photos of an instrument should contact Susan Howard at sdhoward@mines.edu. We will also be scheduling hours when people can come to the Museum to look at the microscopes. The Facebook page will be updated accordingly. Facebook link: <https://www.facebook.com/events/2097716470527460/>

(Continued on page 5)

Joint Field Trip with Cañon City Geology Club, May 19

"Digging Season" is officially underway; and what better way to kick off the fun than with a trip to the School Section Quarry in Cañon City! Special thanks goes out to the Cañon City Geology Club for hosting this field trip, and people of all ages were in attendance. This location is currently being worked for road gravel and may not be open for mineral specimen collecting any longer! We had pleasant weather to collect a few very nice specimens of beryl and schorl; and an abundant quantity of quartz, muscovite, and biotite. Some apatite and garnet crystals were also found. Everyone had a fun time and enjoyed the opportunity of making new friends.

All photos courtesy of Frank Rosenberg



Sarah Shilling uncovers a fantastic beryl crystal - one of the largest found that day!

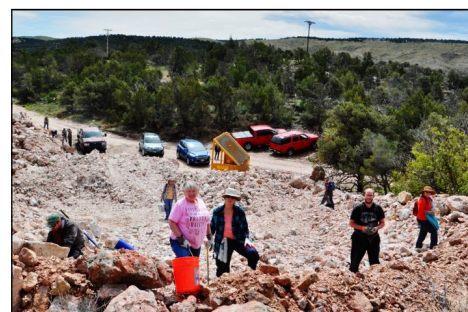


Ben Elick (above center) proudly displays a beryl specimen in granite matrix.

Members of both the Colorado Springs Mineralogical Society and Cañon City Geology Club (right) participated in this time-sensitive outing. At least twelve different minerals were found in this location, quite possibly more once everything is cleaned and sorted.



Special thanks goes to Danny & Connie Inmon for their leadership and permission to explore this exciting location!



Schorl, also known as black tourmaline, is shown here in a milky quartz matrix.



Valerie Babitz considers what is worthy of the bucket...lots of options here!



Gina Dupre and Carol MacCauley exhibit a sparkling muscovite sample.



CSMS Field Trips 2019

June 8, 2019

Harvey's Claim, Hartsel CO
Collectible Minerals - Barite
Leader : Norma & Roger Rhodes
Contact : normajalexander@gmail.com
Status : **Confirmed**

June 22, 2019

Dinosaur Trackways, Eagle Co. CO
Plus Dinosaurs Fossils and collecting in Marine Layer
Leader : Mike W.
Contact : mwebbstudent@yahoo.com
Status : **Confirmed**

June 15, 2019

Topaz Mountain Gem Mine, Tarryall CO
Collectible Minerals - Topaz, Quartz
Leader : Norma & Roger Rhodes
Contact : normajalexander@gmail.com
Status : **Confirmed**

July 13, 2019

Smoky Hawk Mine, Lake George CO
Collectible Minerals - Amazonite, Quartz
Leader : Norma & Roger Rhodes
Contact : normajalexander@gmail.com
Status : **Confirmed**

July 28, 2019

Badger Creek, Hartsel, CO
Collectible Minerals - Peridot
Leader : Robert Berry
Contact : debitcard@msn.com
Status : **Confirmed**

August 10, 2019

Fossil Ridge, Kremmling CO
Collectible Fossils - Ammonite, Clams
Leader : Bill Wyatt BLM Paleontologist
Contact : mwebbstudent@yahoo.com
Status : **Confirmed** - with Summit Historic Society

August 24, 2019

Sedalia Mine, Salida CO
Collectible Minerals : Garnet
Leader : Mike W
Contact : mwebbstudent@yahoo.com
Status : **Confirmed**

August 25, 2019

Calumet Mine, Salida CO
Collectible Minerals : Epidote, Quartz
Leader : Mike W
Contact : mwebbstudent@yahoo.com
Status : **Confirmed**

September (TBD)

Red Feather Lakes CO
Collectible Minerals - Quartz
Leader : Mike W.
Contact : mwebbstudent@yahoo.com
Status : **Tentative** - with Mile High RAMS

September 21, 2019

CF&I Fluorspar Mine, Wagon Wheel Gap CO
Collectible Minerals - Fluorite, Barite
Leader : Mike W.
Contact : mwebbstudent@yahoo.com
Status : **Confirmed**

We are always in need of volunteers to lead and/or assist with many of these field trips!

If you have previously visited any of the "TENTATIVE" marked areas and know your way around the digging areas, please let one of us on the Board know so that we can facilitate that trip!

There may be additional and/or new trips added as the summer months get closer - check the upcoming Pick & Pack issues for revisions and updates!

Fri.-Sat., June 21-22, 9 a.m. to 4 p.m., Mineral and Gem Sale from the estate of Julie Hesse. 2545 Teller St., Lakewood. Julie Hesse, of Basalt, CO, passed away on March 30, 2018. Her family has decided to sell some of the collection to the public. The sale is hosted by Julie's stepdaughter, Laura Mace.

Thur.-Sun., July 18-21, 9 a.m. to 5 p.m., "Home Rock Show" (Sale), by John Haney, 4242 Thompson Ct., Denver 80216. "Rough rock, slabs, cabs, fossils, amber, turquoise, minerals, metaphysical crystals, gemstone bowls & boxes, lapidary equipment & supplies". Contact rocksisme@comcast.net, or 303-296-8268

EPIDOTE, GREEN MONSTER MINE, ALASKA: WITH ED OVER AND ART MONTGOMERY

Mike Nelson csrockguy@yahoo.com



Today a song popped up on the radio that reminded me of a famous mineral collecting duo with connections to CSMS! The crooner was Buck Owens, the song was *Together Again*, and the collectors were Art Montgomery and Edwin Over. I have previously commented on some of their expeditions and here is another blurb. The year was 1936 (had to be summer) and Ed and Art were heading to the Prince of Wales Island along the coast of southeast Alaska (Berry, 2002). The objective of this trip was to collect epidote crystals near Green Monster Mountain (perhaps inspired by the 1935 Smithsonian expedition), a former lead-copper-silver mining area where epidote crystals had been collected since around 1915; Ed and Art were off on another adventure. I keep thinking that 1936 was 80 years ago when tents were probably made of heavy canvas, the camping equipment would have been primitive (compared to today's standards---no REI rain slickers), and work was in a coastal rain forest where temps are cool, humidity high, and rain plentiful (~95 inches per year). Tom Loomis from Dakota Matrix noted that the Green Monster Mountain epidote is some of the best in the world, and

there are numerous epidote localities. Epidote from this locality should be coveted not only because of their quality but because of the effort it probably took to obtain specimens. If the mosquitoes don't get you at this locality the grizzly bears and green monsters will - in the pouring rain. The rocks that produce the epidote are mineralized marbles of the Wales Group (dates around 541 Ma, just about the Cambrian-Precambrian boundary) that have been cooked (contact metamorphism, high temperature) by Cretaceous granodiorite intrusions. These types of deposits are known as skarns and at Green Monster Mountain specifically, as garnet-epidote-diopside skarn meaning these metamorphic minerals are present and are associated with migrating hydrothermal solutions. On a larger scale, garnet-epidote-diopside skarns are part of a larger group known as Copper Skarns that form near intrusions and at/near plate subduction/transition zones (Meinert and Dawson, date unknown). Prince of Wales Island is near the Queen Charlotte Fault that runs from the Cascades (U.S. mainland) to mainland Alaska. It is a transform fault (like the San Andreas) where the Pacific Plate is sliding past the North American Plate and is tectonically active.

I don't have the slightest idea where Over and Montgomery prospected as epidote mines/diggings seem to be scattered over a wide area. For example, Herreid and others (1978) stated: "the principal productive mineral deposits in the area are skarns containing copper, zinc, molybdenum, and gold around the Copper Mountain pluton (Cretaceous). The largest known deposit, the Jumbo Mine, produced 10,194,264 lb of copper, 87,778 oz of silver, and 7,676 oz of gold during the first part of the century (Kennedy, 1963). Museum-quality epidote and quartz crystals have been won from the skarns around the pluton."



Epidote and quartz from Green Monster Mine, Alaska. Width of photo ~8.0 cm.

(CONTINUED ON PAGE 13)

PEBBLE PUPS CORNER



CSMS Pebble Pups & Earth Science Scholars

The Earth Science Scholars & Pebble Pups meet at the Mt. Carmel Veterans Center every THIRD Thursday at 5:30 PM until 6:15 PM or so. We only meet during the academic year, and we include January. So, it is Sept through May. Special announcements and field trips are noted on our blog: <http://pebblepups.blogspot.com> and through the CSMS website: <http://www.csms1936.com>

Greetings,

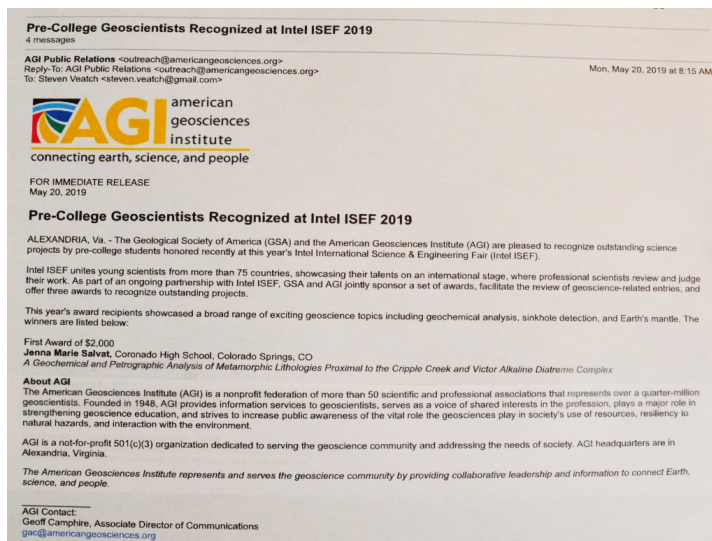
I am pleased to announce that Jenna Salvat, a Pikes Peak Pebble Pup and Earth Science Scholar, competed in the 2019 International Science Fair and won a FIRST PLACE award. Her project explored a suite of metamorphic rocks at several outcrops around the Cripple Creek Mining District. This is Jenna's 4th competition at the International Science Fair.

I have attached a press release (PDF file) that announces an award she received.

Jenna graduated yesterday from Coronado High School and will pursue a degree in geology at Colorado College where she received a scholarship. All of the Pebble Pups wish her the very best.

Kind regards,
Steve

Steven Wade Veatch
Veatch GeoScience, L.L.C.



Jewelry Group “Show and Tell”

At our May club meeting, Bill Arnson, our Jewelry Group Leader, led a lively show and tell of our club member's jewelry making skills. We had a large number of very skilled jewelry craftspeople at the presentation and it was especially interesting to hear how artisan had person crafted their own objets d'art! All photos courtesy of Frank Rosenberg.



Bill Arnson exhibits several turquoise bolo ties during his presentation. He stressed the importance of “Make your own mistakes!” when learning to craft your own décor.



There were 8 members in all who brought different types of handmade jewelry; including wire-wrapped cabochons & pendants, rings, bracelets, earrings, and brooches to name a few! The room was undoubtedly full of talent that night!



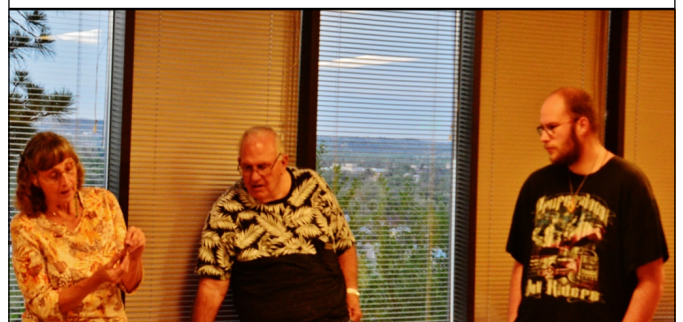
Ellie Rosenberg proudly displays a jade pendant made from material discovered on an Oregon beach.

Barbara Middlemist explains her crafting techniques with Bill Arnson during the presentation.



Allan Massager and lumie Towels have more than 110 years of combined jewelry-making experience! His ring is made from self-mined turquoise.

Sharon Holte (left) and Chris Burris (right) compare notes with Bill Arnson regarding what it takes to put together aesthetic yet durable ornaments.



To Stop a Thief: A Letter Warning Cripple Creek's Winfield Scott Stratton

By Steven Wade Veatch

It began with a letter that Augustus Dominick Bourquin, a Colorado prospector, wrote to warn Winfield Scott Stratton, the Cripple Creek mining mogul and owner of the Independence Mine, about one of his employees at the mine.

Bourquin's letter is an exceptional illustration of a primary source that offers a first-hand eyewitness account of events. It helps us take a front-row seat to the unfolding of history. Bourquin's letter is among Stratton's historic papers that are stored at the Western Museum of Mining and Industry in Colorado Springs, Colorado.

In his letter, Bourquin warns Stratton that one of his employees, John Stark, is a thief. According to Bourquin's letter, John Stark was an unscrupulous man that committed acts of larceny wherever he went. Stark even raided the caches of clothes and supplies miners left covered with rocks along the trail on their way to the Klondike goldfields, depriving those miners of necessary supplies. Bourquin's letter also mentions the problem of high-grading or theft of gold in the Cripple Creek mining district. Here is his letter:

Aspen, Colo. Oct. 17th, '98.

W. S. Stratton

Victor, Colo.

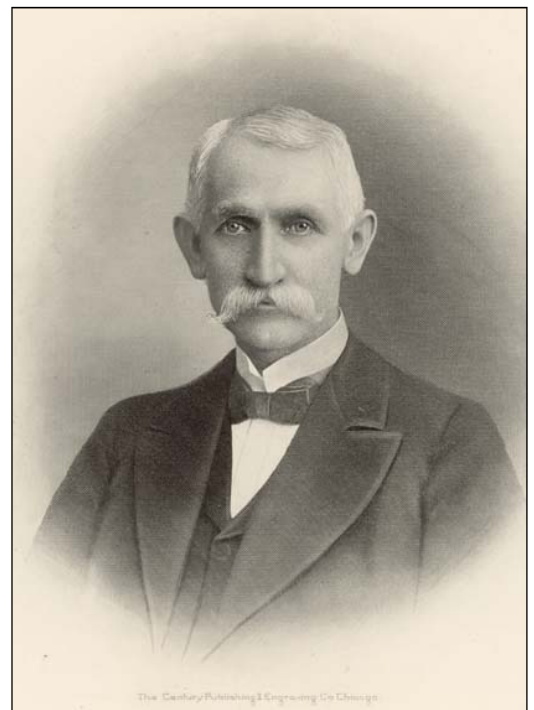
Dear Sir—

I feel that it is my duty to give you a little of the history of a man who is now in your employ [sic]. A man who has proven himself a thief on every occasion where he has had an opportunity to pilfer from others. That man is no other than John Stark. Mr. Stratton, I returned in Aug. from the Klondike and was a partner during the winter with Stark. There was [sic] four of us in partnership on a lay, or lease, on Bonanza Creek.¹ Stark began pilfering aboard the steamship Cleveland on his way north from Seattle.² Stole his winter supplies from one of the Mercantile Co's

at Fort Yukon.³ He robbed [sic] one of our partners of every dollar of gold dust he had, on the pretense, that he, Stark, would take it down and deposite [sic] it with his own in Dawson.⁴ Stark skipped the country between two days and carried off all the dust, leaving our partner stranded in Dawson where he is today.

Stark robbed [sic] caches of clothing and provisions whenever he had an opportunity, against my protest. He stole clothing and provisions from the cache of some poor fellows who had to walk out of the country during the winter on account of a shortage of food. Stark robbed [sic] me of nearly \$200 of which I cannot recover as the theft was committed [sic] in Canadian Teritory [sic].⁵ The Mercantile Co. who he robbed in Fort Yukon were [sic] on his track in Dawson, when he, under an assumed name, left Dawson between two days in a small boat, about June 1st.

Stark often spoke of his work on the Independence mine. Said he has some rich ore from the mine; one piece worth eighty dollars. Spoke of your keeping detectives around all the time but they were not sharp enough to catch anyone. Said he had cut a rich streak of mineral fifteen inches thick and timbered it in, with the help of the Super, hoping someday to get a lease on the ground. According to his statement the superintendent stood in with him, but his name I have forgotten. This unscrupulous scoundrel spoke very disrespectful [sic] of you at different times. Said you had nicely furnished rooms in Cripple for no other purpose, that he knew of, but



W. S. Stratton (1848-1902) came to the Cripple Creek Mining District in 1891 when he was 42 years old and staked the Independence Mining claim on July 4, 1891. The Independence was among the major producing mines in the district and made Stratton a multi-millionaire. This image is in the public domain in the United States.

(CONTINUED ON PAGE 9)

to take lewd women and have a good time. Mr. Stratton, I have given you simply an outline of the methods practiced by that scoundrel, that you may not be deceived by him. I regret to hear that he has secured a trusty position on your property when there are more worthy people to be had. I can make an affidavit to thease [sic] statements should you desire.

Very respectfully,

A.D. Bourquin

Although it is clear from the letter that Bourquin had a negative attitude toward Stark based on his alleged dealings with him, perhaps we can judge the veracity of his claims by studying Bourquin's life story.

Augustus Dominic Bourquin was born in 1852 in Tidioute, Pennsylvania. Known as "Gust" to his friends, this free-spirited young man craved adventure and excitement.

In 1875, Bourquin first moved west and worked a placer mine in Arizona. Later, he worked in the mines at Red Bluff, California and Reno, Nevada. Bourquin returned home in the fall of 1877 and worked on the family farm in Pennsylvania (Bourquin, 1951).

Next, he traveled to Kansas in 1879, where he homesteaded (Bourquin, 1951). Bourquin moved to Kansas at a bad time—a drought held Kansas in its dry and dusty grip. The Manhattan Nationalist, on April 25, 1879, had this to say: "The wind made the bleeding soil of Kansas sift through a pine board on Monday [April 21]. The poor housekeeper that had just shaken carpets and cleaned windows, sighed mournfully as they [sic] saw the sand heaps on windowpane and floor" (Malin, 2018). This relentless drought ended his days of home-

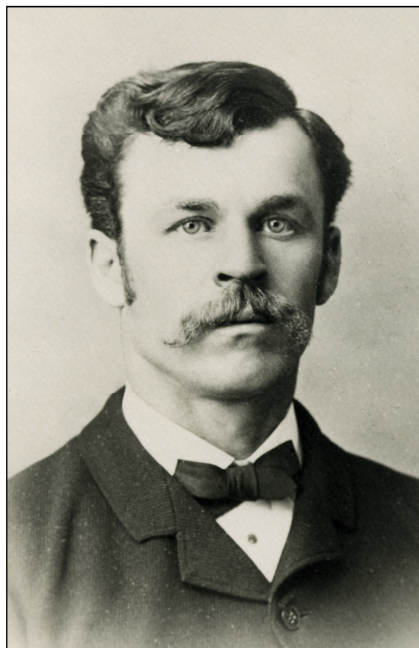


Figure 2. Photo of A.D. Bourquin (1852 to 1899). His father was Swiss and his mother was French. Bourquin was noted in the Aspen newspapers as being a principal in the Austin Mining Excavating Company. Photo source: Robert Clark (great-grandson). Used with permission.

steading, and in the spring of 1880, Bourquin, along with his two brothers George and Jess, traveled west as they drove a team of mules and a wagon to Denver (Clark, 2018). The brothers then sold the mules and Bourquin trekked to Aspen, Colorado. He operated several mining claims in the area and served as councilman for the City of Aspen (Clark, 2018).

Bourquin caught a bad case of gold fever and joined the Klondike Gold Rush. After spending a season in the Klondike washing gold-laden gravels in Bonanza Creek, he returned to Aspen, Colorado.

Bourquin died a few months after he mailed his letter to Stratton. He had caught the flu while working on a mining claim and died five days later, on Jan 14, 1899, at the age of 46 (Clark, 2018). The Woodmen of the World, a fraternal benefit society designed to provide insurance and financial security for its members, buried him in the Aspen Grove Cemetery in Aspen, Colorado. Bourquin's family then moved his body to the Red Butte cemetery after it opened in 1900. His mother Celestine is buried in the same plot, along with his brother Amos, Amos' wife, and their daughter.

And so, a letter reveals a first-hand account of an episode in the writer's life. The letter led to research that painted a portrait of the writer, A.D. Bourquin, who spent a life well-lived as a miner and adventurer. He followed the trails that pointed to gold and silver deposits, no matter how difficult the passage. All regarded him as fine man and a pioneer who guided his family to the West.

Although we will never know if Stratton answered Bourquin's letter, it is known that John Stark, after his adventures in the Klondike, returned to the Cripple Creek Mining District and worked as Stratton's foreman at the Independence Mine. Eighteen months later, Stark was promoted to superintendent of the Independence Mine (The Fortunes of a Decade, 1900). It seems that Stratton did not read Bourquin's letter or believe what it said about his foreman, and as a result, we may never know the facts that surrounded Stratton's decision to ignore the warning in Bourquin's letter.

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2019 CSMS OFFICERS

Sharon Holte, President

John Massie, Vice-President

Open, Secretary

Ann Proctor, Treasurer

Adelaide Bahr, Membership Secretary

Taylor Harper, Editor

Laurann Briding, Member-at-Large

Bill Arnson, Member-at-Large

Ernie Hanlon, Past President

2019 CSMS CHAIRPERSONS

John Massie, Program Coordinator

John Massie, Show Volunteer Coordinator

Mike Webb, Field Trip Coordinator

Steven Veatch, Science Fair Chair

Frank & Ellie Rosenberg, Librarians

Mark Schultz, Social Committee Chair

Ann Proctor, Store Keeper

Lisa Kinder, Show Chairman

Lisa Kinder, Webmaster

Lisa Kinder, Facebook Keeper

Mike Nelson, Federation Representative

TBD, Federation Representative

SECRETARY'S SPOT by Sharon Holte

General Meeting Minutes for the
Colorado Springs Mineralogical
Society - 5/16/19

CSMS General Assembly Meeting Minutes

Thursday: May 16, 2019 Time: 7:00 p.m. At: Mt. Carmel Veterans Service Center

Address: 530 Communications Circle; Colorado Springs, CO 80905

I. Our President, Sharon Holte called the Meeting to order at 7:00p.m.

II. John Massie, our Vice-President, led the Pledge of Allegiance

III. Introduction of guests. The Inmons, new CSMS members from Canyon City were present. Dan Is the CCGC Field Trip coordinator

IV. Introduction of new members by Adelaide Bahr – One new member; Nicholas McAuliffe was not present

V. Program – John Massie introduced Bill Arnson's Program, Making Jewelry - Show and Tell. After Bill spoke, several members who had brought jewelry described their method and favorite medium. These members were Bill Arnson, Jume Towels, Allan Massager, Ray Quinn, Barbara Middlemist, Christopher Burris, Ellie Rosenberg, and Sharon Holte

VI. Show Updated – Lisa Kinder presented a short update on the Show - She asked people to post a notice advertising the show on their neighborhood association Facebook pages. She discussed the setting up which will be Thursday May 30. John Massie will set up the electric cables which the Club owns. Exhibitors will be able to drive into the venue to unload but have only 10 minutes for a 10' x 15' booth and 15 minutes for a 10' x 30' table. There will not be a pot luck the opening night because it has turned out to be hard to organize. There will be a participant dinner Saturday night. Lisa urged people to sign up for volunteer jobs with John Massie. Lisa also hopes that many Pebble Pups and Junior Earth Scholars will be able to help with taking down the tables and cleaning up at the end of the Show

VII. Break for 20 minutes: for drinks, cookies, and goodies and door prizes.

a. There were about 45 people at this meeting, 5 minerals were given out to:

b. Donations of nice minerals with scientifically labeled information are greatly appreciated!

VIII. We still need a Secretary!!

IX. We could still need a Field Trip Coordinator on this end. Mike does a fine job: however, we could use someone to make certain everything is handled on this end!!!!

X. Officer Reports

a. President – Sharon Holte:

i. Sharon read a communication from Steve Veatch announcing that Jenna Salvat won several prizes at the Colorado State Science Fair. The Board voted to present Jenna with an award and trophy in recognition of her many contributions to CSMS over the years. Jenna will enter Colorado College as a Freshman

ii. Calendar of Deadlines – We are caught up with all the deadlines

iii. RMFMS Convention in Prescott, Az. on August 2, 3, 4, 2019 - Mike Nelson is not able to represent us. Sharon asked for a volunteer but no one stepped forward

iv. Student Grant Proposals - Mike Nelson has submitted the report: he has received three applications and recommended two for a total of \$4020. The Board endorsed both and the General Membership approved the expenditure. The proposals are: 1) 40Ar/39Ar Age Constraints on Thermal Metamorphism in Paleoproterozoic Basement from Emplacement of 1.4 Ga Plutons, Needle Mountains, Southern Colorado by Madison Lewis. 2) Exploring the Timing and Origin of Mineralized Breccia Pipes, Silver Gulch, Ironton, Southwestern Colorado, by Ryan Johnson. Mike Nelson said that after the research is completed students typically give three professional talks and always acknowledge the support from our CSMS; he added this is good publicity for us.

v. Mineral collection in trailer. Sharon asked for information on the donor of the mineral collection that is in the Trailer; no one, not even Kay Thompson remembers

b. Vice-President – John Massie

i. Speakers:

1. May 16, Bill Arnson / Making Jewelry – Show and Tell

2. June 19, Amber Sanderson / Staking Unpatented Claims on Federal Land

3. July 18, Roger Pittman / Mineral Collecting Locations in Colorado

4. August _no meeting / no speaker

5. September 19, Bob Hickey / _____

6. October 17, Ben Elick / History of CSMS Pebble Pups

7. November 21, Tracie Cardwell / _____

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2019 SATELLITE GROUP CHAIRPERSONS

Crystal, Kevin Witte/Bob Germano

Faceting, John Massie/Doreen
Schmidt

Fossil, Jerry Suchan/Joyce Price

Jewelry, Bill Arnson

Lapidary, Sharon Holte

Pebble Pups, Steven Veatch/
Betty Marchant

2019 CSMS LIAISONS

Florissant Fossil Beds
National Monument, Steven Veatch

Western Museum of
Mining & Industry, Steven Veatch

(CONTINUED FROM PAGE 10)

- c. Treasurer – Ann Proctor – No report
- d. Secretary(s) Sharon Holte and Adelaide Bahr – No Report
- e. Membership Secretary – Adelaide Bahr – No Report
- f. Editor – Taylor Harper – No Report
- g. Member at Large – Laurann Briding – No Report
- h. Member at Large – Bill Arnson – No Report
- i. Past President – No Report
- j. Website Coordinator – Lisa Kinder – No Report

XI. Satellite Groups

- a. Crystal Group – Kevin Witte – The group will start meeting in September
- b. Faceting Group – John Massie – No meetings until September. There will be a crystal sale at Bill Kern's house next week-end
- c. Pebble Pups – Steven Veatch – No Report
- d. Fossil Group – Jerry Suchan – Next meeting is June 4. The subject is Geology and Paleontology of the Manitou Formation, a lower Ordovician marine deposit by Jerry Suchan
- e. Jewelry Group – Bill Arnson, by appointment only
- f. Lapidary Group – Sharon Holte, by appointment only please call Sunday evening after 6:30 p.m.
- g. Field Trip Leader – Mike Webb / Sharon Holte – Danny and Connie Inman introduced themselves; they are from Cañon City and have recently joined CSMS. They announced a Field Trip Sunday, May 19 to the School House Quarry. The quarry has a new owner who crushing the rocks and grading the property for an amphitheater and a tiny house community.

XII. Liaisons

- a. Claims – Frank Rosenberg – Frank announced the John Massie will lead a field trip to our new claims Sunday May 25. He reminded members that they must fill in the holes before leaving
- b. Library – Frank & Ellie Rosenberg – No Report
- c. Social Coordinator – Mark Schultz – No Report
- d. Store Keeper – Ann Proctor – will have the store open during the show

XIII. Unfinished Business – none at this time

XIV. New Business

- a. Roy Wilson's daughter Charlene has contacted Sharon to look at minerals she has found in her father's house. Sharon has previously bought minerals from Roy's collection. Some of this material will be on sale at Bill Kern's place May 24 & 25. Some left over minerals are going to be donated to the silent auction. Sharon purchased more of Roy's collection this week. There was a large table full of boxes and containers with some nice specimens in the old CSMS shed. These were donated to the CSMS Silent Auction 2019 in Roy's name. Austin Cockell came out to look at and sort through these boxes. He took several items home to clean them. They will be available at the auction.

XV. Meeting adjourned by our President, Sharon Holte at 8:56 p.m.



References

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Notes on the letter:

1. On August 16, 1896, prospectors discovered gold on Bonanza Creek, a tributary of the Klondike River in Canada's Yukon Territory. The watercourse became the center of the Klondike Gold Rush (1897-1898). This discovery triggered a stampede of thousands of prospectors and fortune seekers to the area (What Was the Klondike Gold Rush?, 2018).

2. The Cleveland, operated by the North American Trading & Transportation Company, was one of many steamships that carried passengers to and from the Klondike goldfields (Woodin & Spude, 2016). The company sold fares only to the "hardiest of men." The demand for a ticket was high. After leaving Seattle's docks, the Cleveland went as far as Fort

St. Michael, where a connection was made with river steamers that took passengers and goods up the Yukon River to the mines. Fort St. Michael was established by the US Army in 1897 to establish order during the Klondike Gold Rush and served as a major gateway through the Yukon River to the area. In 1903, the Cleveland was lost in the Bering Sea and was never recovered (Andrews, 1916).

3. Fort Yukon, during the Klondike Gold Rush ("Starvation Winter" of 1897-1898) took in 200 prospectors from Dawson City who were short of supplies (McLaughlin, 2018).

4. Dawson City, the center of the Klondike Gold Rush, began in 1896, where it displaced a native encampment. The city grew into a busy place of 40,000 by 1898. A year later, after the gold rush ended, its population plummeting to 8,000 people.

5. The stolen \$200 is equivalent to \$2,855 in 2018 dollars.

Kennedy (1963) also noted the Jumbo Mine deposits are famous for their epidote crystals. Locally epidote is an abundant mineral in the skarn zone at the Jumbo Mine. It occurs as medium-sized irregular grains replacing garnet, in groups of radiating crystals surrounded by later quartz and calcite, and as coarse crystals of exceptional beauty and complexity of crystal form lining the walls of vugs. The epidote specimens from the Jumbo area are rivaled only by those on the Tyrol [epidote discovered in 1865 in Austria and often considered the world's best]."

The epidote locality noted by Min-Dat at Green Monster Mountain is the Rex Prospect (Idela Prospect): "this prospect consists of three short, caved adits and some pits and trenches that

probably date from before WW I. All or most are on a large block of (14?) patented claims that extends northwest to the Green Monster Mine (CR153). The deposit consists of mineralized zones along faults in garnet-epidote-diopside skarn."



Terminated quartz crystal with epidote inclusions. Width of photomicrograph ~8 mm.

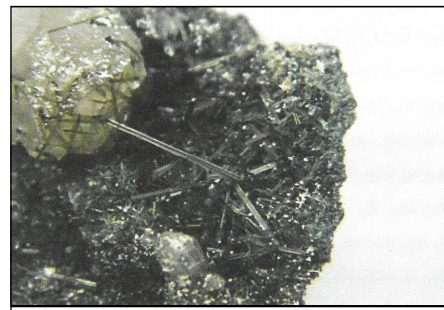


Jackstraw arrangement of epidote crystals. Width of photomicrograph ~8 mm.

orientated positions are known as jackstraw crystals are "going in every which direction." There is also a larger terminated quartz crystal that has included epidote crystals. One of the more interesting aspects of the specimen is a single epidote crystal that is only partially inserted into the quartz crystal. I presume, but am not certain, that the epidote crystals formed before the quartz and are what The Quartz Page (http://www.quartzpage.de/inc_text.html) refers to as proto-genetic inclusions. One characteristic of these epidote-first inclusions is that included fibers run through the entire crystal at random orientations. In addition, there are numerous smaller and doubly terminated quartz crystals scattered around. It is one of the more aesthetically pleasing specimens in my collection. Epidote, a calcium-aluminum-iron silicate,

is not an uncommon mineral occurring in a wide variety of metamorphic and igneous rocks; however, most specimens for sale at shows generally are large terminations (wedge variations), or lustrous green single crystals, or "medium size" elongated and interconnected (jackstraw) crystals. Some specimens containing numerous crystals are quite large measuring several centimeters and make impressive displays. Most of my previous epidote crystals were collected (with better knees) from the Calumet Iron Mine near Buena Vista in Chaffee County, Colorado.

Epidote almost always occurs in some shade of green and most collectors immediately recognize specimens that are the common pistachio green color. However, colors can range to almost a black to yellow to brown and all sorts of shades in-



Note the large single crystal of epidote partially included in the quartz crystal.

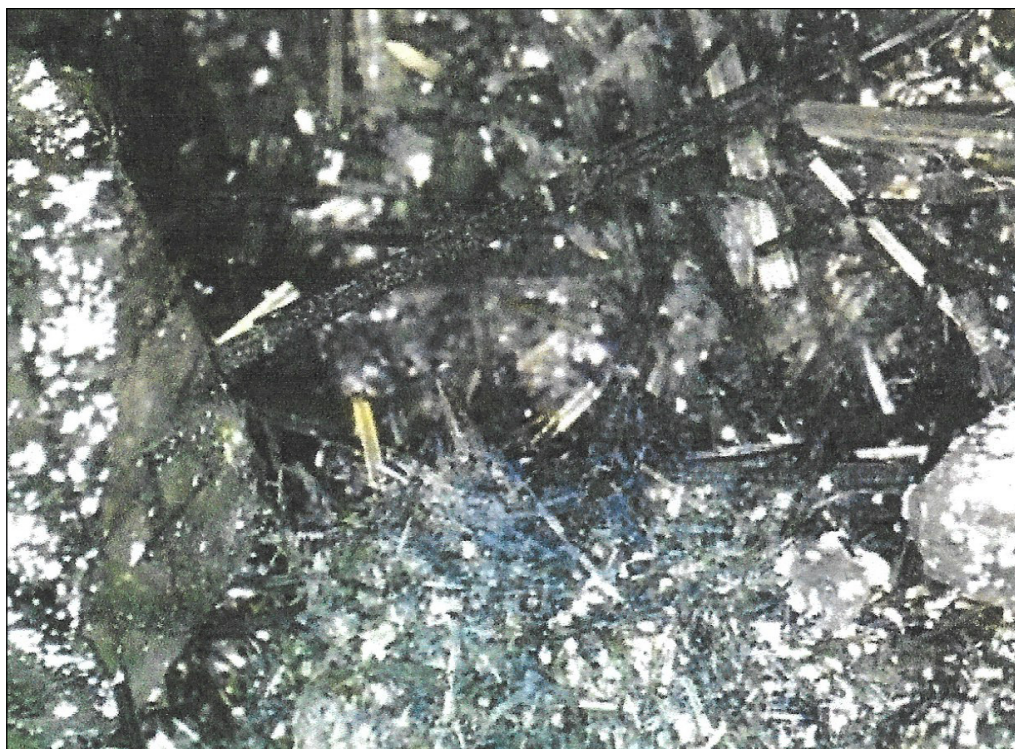
between. Crystals leave a white/clear streak and are slightly softer than quartz at ~6.5 (Mohs). They usually have a vitreous luster and darker colors are opaque while the very light shades are translucent/transparent. Epidote (Al/Fe-rich) is in solid solution (a transition) with clinozoisite (Al-rich) and it is often tough to distinguish between the two minerals. Epidote is "usually" darker in color due to a higher iron content while clinozoisite is a "lighter" shade due to less iron in the mineral and more aluminum. In addition, several members of the Epidote Supergroup are variations of the basic epidote. Some have legitimate mineral names such as hancockite (enriched with lead) while others are simply noted as epidote-(Sr) and enriched with strontium. All are similar "looking" (commonly prismatic crystals) and belong to the monoclinic crystal system.

AFTERTHOUGHTS

I simply find it amazing that the early collectors (including paleontologists) were able to access sites across the world with minimal support help. I presume Over and Montgomery traveled to Prince of Wales Island by ship. Did they then pack in collecting and camping equipment with animals, or on their back? How did they wrap and pack out specimens? Did they worry about grizzly bears? Today the Island only has about 5000 human inhabitants and Craig is the largest population center at 1500. Is Green Monster Mountain close enough to supply centers? All of these, and more, are some of life's persistent questions. I don't have access to papers or notes relating to the Alaskan Expedition. In fact, I was uncertain if Montgomery went to Alaska or if he stayed in New York to sell specimens. However, George White (Berry, 2002) stated, "Other outstanding discoveries were made by the pair...Prince of Wales

(CONTINUED ON PAGE 14)

Alaskan epidote in 1936” and Crosby (2015) noted that “1936 brought new energy into the canyon [Clay Canyon in Utah collecting for variscite] with the entry of Arthur Montgomery and Edwin Over who had just been collecting epidote at Green Monster Mountain on Prince of Wales Island, Alaska.”



Note the different sizes of epidote crystal. The lower masses are "needles." Width ~8 mm

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Share your experiences, your new finds, or simply your enjoyment of our last field trip.

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Articles are preferred in MS Publisher, but the editor will correct font.

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