PICK&PACK
THE BULLETIN OF THE COLORADO SPRINGS MINERALOGICAL SOCIETY Published Since 1960

Colorado Springs Mineralogical Society
Founded 1936
~ Lazard Cahn ~
Honorary President
"Pick & Pack"
Volume 63 No. 6
July 2023

CSMS General Assembly

Thursday, July 20, 2023 7:00 PM
Mt. Carmel Veterans Center

Program Speakers:

~ Martinovich and Schlosser ~

Geospatial Information Systems (GIS) Interns
Friends of the Fossil Beds

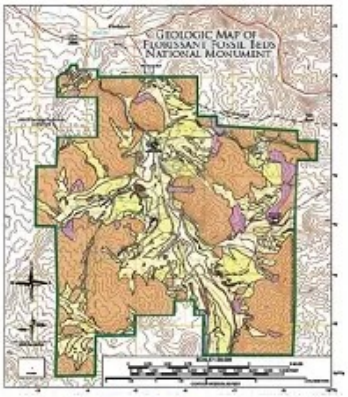
Everyone BRING SNACKS (A-Z)

Society members are encouraged to bring specimens to general assembly to share and/ or for help with identification

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

In This Issue …

Re-Mapping the Florissant Fossil Beds



Credit: nps.gov

Project Overview

GIS interns Ashley Martinovich and Paityn Schlosser are attempting to improve on past geologic surveys by re-mapping portions of the Florissant Fossil Beds, starting in the park's southern portion and mapping northward to converge with the most updated geospatial data. The re-mapping will enhance clarity of current maps, and also challenge prior interpretations to ensure that the various lithologies mapped in the park are truly present. They will use an Eos Arrow Gold GNSS receiver, NPS NTRIP corrections, and ESRI products, such as ArcGIS Pro, ArcGIS Online, and Field Maps, to collect data within an accuracy of several centimeters.

About Ashley Martinovich: Ashley Martinovich is a recent graduate of Colorado State University, receiving her bachelor's degree in Fish, Wildlife, and Conservation Biology with a minor in Geospatial Information Systems (GIS) for Natural Resources. She has cultivated a deep appreciation for the intricate connections between organisms and their habitats, and an even greater passion of using GIS skills to analyze these relationships. Her experience in geospatial field methods and geo-spatial applications will aid in her position of GIS Intern, as she will update the geologic maps at Florissant Fossil Beds National Monument.

About Paityn Schlosser: Paityn Schlosser, a recent graduate of Arizona State University, is applying her bachelor's degree in Geological Sciences and minor in Parks and Protected Area Management in her role as a GIS intern. With a certificate in Field Geology, Paityn aims to use her skills of geological mapping and interpreting stratigraphy to expand the current understanding of the paleo-depositional history and expunge generalizations of units in the park. She'll apply her skills in digitizing geologic maps and creating interactive web-mapping applications to increase the accuracy and accessibility of the Florissant Fossil Beds Park Atlas.

CSMS Group Calendar

Jul '23	Aug '23						
12 Jul	9 Aug	Fossil Group	2nd Wed	6:00 PM	East Library Annex	Kristine Harris Richard Villareal	719-593-1524 831-760-6985
6 Jul	3 Aug	Board Meeting	1st Thur	6:00 PM	Zoom	John Massie	719-338-4276
11 Jul	1 Aug	Pebble Pups	1st Tue	4:15 PM	East Library	David St. John	719-424-9852
20 Jul	17 Aug	General Assy	3rd Thur	7:00 PM	Mt. Carmel Center	John Massie	719-338-4276
27 Jul	24 Aug	Crystal Group	4th Thur	7:00 PM	Mt. Carmel Center	Kevin Witte	719-638-7919
By appt	By appt	Faceting Group	By appt	By appt		John Massie	719-338-4276
By appt	By appt	Lapidary Group	By appt	By appt	Sharon's House	Sharon Holte	719-217-5683

Community Events (Pete Modreski)

Jul 13: 2:00-3:00 PM, Denver Museum of Nature & Science, Earth Science Colloquium, "Usurpers and insinuators: Competition and environmental change in the Great American Biotic Interchange in mammals," by Marie Hoerner (CU - Colorado Springs). In the VIP Room. Enter through the staff/volunteer entrance.

Aug 24: 2:00-3:00 PM, Denver Museum of Nature & Science, Earth Science Colloquium, "Mass extinctions and high resolution astrochronology in the Upper Devonian: Tales from New York and Colorado," by Jeff Over (SUNY Geneseo). In the VIP Room. Enter through the staff/volunteer entrance.

Oct 10: 2:00-3:00 PM, Denver Museum of Nature & Science, Earth Science Colloquium, "To Xiphactinus and beyond: The savage seas of ancient Kansas," by Anthony Maltese (Rocky Mountain Dinosaur Resource Center). In the VIP Room. Enter through the staff/volunteer entrance.

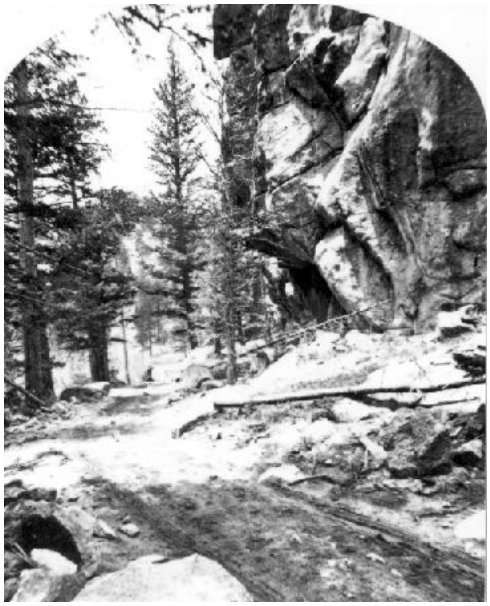
Nov 6: 2:00-3:00 PM, Denver Museum of Nature & Science, Earth Science Colloquium, "Our Earth was completely frozen? Twice?," by Carol Dehler (Utah State U.). In the VIP Room. Enter through the staff/volunteer entrance.

Dust and Dreams: The Rocky Road to Riches
By Steven Wade Veatch

They journeyed over rough roads
by horse, mule, and wagon
through meadows of grass freckled
with summer blossoms,
then through thick pine stands
and past toppled trees tilted at odd angles
to the gold mines.

Today, along the abandoned
roadbeds are fragments of history:
rocks fallen from ore wagons,
a blacksmith's mule shoe,
a busted whiskey bottle,
all evidence of shattered dreams.

Through the foggy mist among the trees,
I thought I saw a spectral teamster
take his reins and smile
as his wagon jolted along a bumpy road
and disappeared into Colorado's past.



Roadway under Castle Rock. Boulder County, Colorado. *Photo date 1873 by W. H. Jackson (jwh01420). Credit: U.S.G.S.*

AFMS ENDOWMENT FUND
by Richard Jaeger

I am the Rocky Mountain Federation Regional Chairman for the AFMS Endowment Fund. Cheryl Neary, a member of the Eastern Federation, is the AFMS Endowment Fund Chair and the AFMS Central Office Administrator.

Basically, this is a raffle drawing with tickets being sold at $5 each or five tickets for $20. The drawing will be held at the NFMS/AFMS Convention in Billings, Montana in August. People from around the American Federation donate prizes for the raffle, which may be jewelry, crystals, minerals, fossils, books, or other items, each valued from $75 to $200. The drawing is handled so there is at least one winner from each of the seven regional federations; last year we had five winners from the Rocky Mountain Federation. We usually have about three or four winners from the RMFMS.

As items are donated, pictures of them will appear in the AFMS Newsletter and on the American Federation Website, <amfed.org>. There are usually around 30 items.

This is a major way to financially support the American Federation's efforts on behalf of our hobby. Currently the funds go towards the Junior Rockhound Program, Judges Training, and preparing Programs for distribution to Regional Federations (programs that can be used by individual clubs). Over $5,000 was raised last year.

Purchasing the tickets: Cheryl requests that your checks for tickets be sent to the regional chairs (for RMFMS, send to Richard Jaeger, 3515 E. 88th St., Tulsa, OK 74137) so we can issue tickets and have a record of who has entered. Checks should be made payable to the "AFMS Endowment Fund."

We then forward those checks to Pat LaRue, the AFMS Treasurer. I will fill out the proper number of tickets for each contribution, send the stubs to the donating individual, and get the tickets to the NFMS/AFMS Show in Billings in August to be put into the RMFMS bag. There will be at least one general prize ticket, maybe two or three, drawn from each of the bags for the seven regional federations. After that, all tickets will be dumped into one bag, and further drawings will take place until all the prizes have been awarded.

I hope that many of you will participate and hopefully be winners in Billings. You need not be present to win. I would also be happy to accept any donated prizes for the raffle or they can be sent directly to Cheryl Neary; the more prizes, the more winners, and hopefully, more money raised. Cheryl's address is: 42 Jefferson Ave., Patchogue, NY 11772. My wife and I are each donating a piece of jewelry for Endowment Fund prizes. My contact information is provided below. Please share this information with your club members and thanks for your consideration.

Please purchase some tickets – and hopefully get your ticket drawn in Billings in August.

Richard D. Jaeger
3515 E. 88th St.
Tulsa, OK 74137-2602
918-481-0249 RjgrSci@aol.com

About the AFMS - A non-profit educational federation of seven similar regional organizations of gem, mineral and lapidary societies. The purpose of AFMS is to promote popular interest and education in the various Earth Sciences, and in particular the subjects of Geology, Mineralogy, Paleontology, Lapidary and other related subjects, and to sponsor and provide means of coordinating the work and efforts of all persons and groups interested therein; to sponsor and encourage the formation and international development of Societies and Regional Federations and by and through such means to strive toward greater international good will and fellowship. Founded in 1947.

About the RMFMS - A non-profit educational organization. The purpose of the Rocky Mountain Federation is to have a close association of all clubs in the Society to promote the study of earth sciences, including the lapidary arts, the study of fossils and paleontology, and related crafts. The RMFMS was organized in 1941, and held its first annual convention at the Argonaut Hotel in Denver, Colorado. There were 16 organizations in attendance. The RMFMS became one of the original four founders of the American Federation of Mineralogical Societies when it was organized in 1947.

President's Corner

John Massie
CSMS President

2023 Satellite Group Chairs

Kevin Witte/ Bob Germano, Crystals
John Massie/ Bertha Medina, Faceting
K. Harris/ R. Villareal, Fossils
Vacant, Jewelry
Sharon Holte, Lapidary
Vacant, Micro-mount
Vacant, Photography
David St. John Pebble Pups

2023 Liaisons

Florissant Fossil Beds National Monument:
S.W. Veatch
Western Museum of Mining and History:
S.W. Veatch

Secretary's Spot

John McGrath

2023 CSMS Officers

John Massie, President
Shane Riddle, Vice-President
John McGrath, Secretary
Ann Proctor, Treasurer
Adelaide Bahr, Membership Secretary
John Emery, Editor
Chris Burris, Member-at-Large
William Meyers, Member-at-Large
Sharon Holte, Past President

2023 CSMS Chairpersons

Shane Riddle, Program Coordinator
John Massie, Show Vol Coordinator
Kyle Atkinson, Field Trip Coordinator
Vacant, Science Fair Chair
Frank and Ellie Rosenberg, Librarians
Mark Schultz, Social Committee Chair
Ann Proctor, Store Keeper
Lisa Cooper, Show Chairman
Lisa Cooper, Webmaster
Lisa Cooper, Facebook Keeper
Mike Nelson, Federation Rep
Vacant, Federation Rep

Presidential Matters

A message from CSMS President John Massie:

Everyone check the Pick & Pack for field trip schedules. Summer is a great time to collect and enjoy the outdoors.

I want to personally thank Lisa Cooper for the wonderful job she did managing the Pikes Peak Gem, Mineral, and Jewelry Show this year. It was another great show. I also want to thank the volunteers who made the show an amazing success: Betty Merchant, Kyle Atkinson, Shelby Shaffer, Alex Field, Rachel Mc Donald, Bill Meyers, Mike Nelson, Linda Atkinson, Bob Germano, Bob Landgraf, David St John, Chris Burris, Bill Kern, John McGrath, Bob Falls, Carol Falls, Valerie Babitz, Barbara Middlemist, Brenda A., Jennie McGuckian, Mike McCarty, Sara Frear, Tom Towles, Ayumi Towles, Lynn Van Sicker, James Geyer, Brian Annen, Maureen Richardson, Ray Quinn, Tina Cox, Frank Rosenberg, Elli Rosenberg, Randy Hurley, Brenda Perkins, Jerry Perkins, Shane Riddle, and Kathy McCarty. If I missed anyone I am sorry, I took the names from the sign up sheets. My special thanks to Adelaide Bahr and Barbra Landgraf for filling in for Ann Proctor who could not help this year.

I also want to welcome all the new members who joined at the show. I am looking forward to working with all new members this next year.

John Massie
CSMS President

CSMS General Assembly Minutes

No minutes to report. No official society business was conducted in June.

Pebble Pups
David St. John

CSMS Pebble Pups and Earth Science Scholars

Fossilfun14@gmail.com

Pebble Pups and Earth Science Scholars

June was an amazing month for our club and pups/scholars the meeting at the East Library was so much fun as we learned about “Theio” our only known dinosaur found in Colorado Springs in the Garden of the Gods in the 1878 by Professor John Kerr of Colorado College. O.C. Marsh famous paleontologist took it back east and was lost in boxes for over 120 years then rediscovered when the Garden of the Gods Visitors Center partnered with the Denver Natural History Musuem in 1994. Please check out the display at the Visitor Center or attend the lectures about “Theio” offered occasionally by staff. Sawyer Blizzard has published an article on “Theio” and is our Earth Science Scholar fossil star. The tracks at Dinosaur Ridge are now believed to belong to “Theio” iguanodons species so hopefully a full skeleton will be found.

Pebble Pups at the CSMS Rock Show

The June CSMS rock show was amazing for Pebble Pups and our booth was a big hit with local Colorado Springs families. Thanks to volunteers Blake, Betty, Kathy and all who donated samples to the pups.

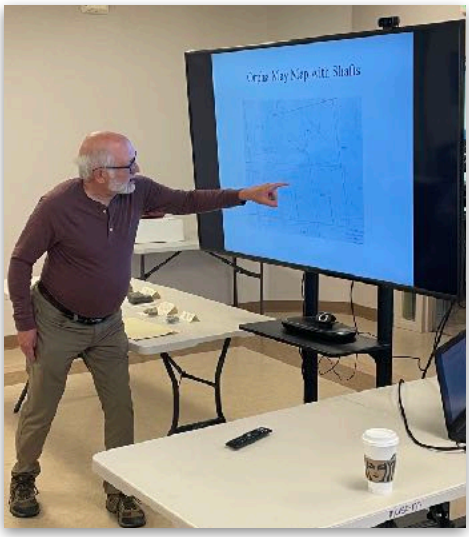
Geology STEAM Camp at Western Museum of Mining and Industry

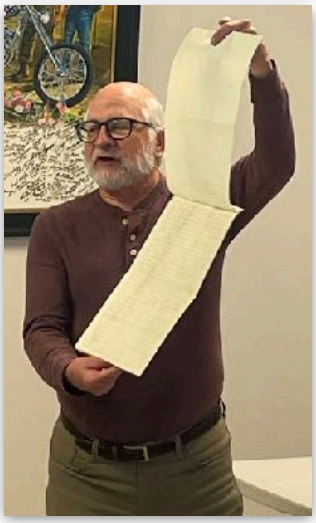
As a part of our outreach programs, I did a hands-on lesson on the rock cycle and general rock hounding. The June session was so much fun and the July session should be a really hot experience. There may openings still if you are interested in July call the museum or go on-line. Every student received cool samples to take home and add to their collections. If anyone has access to a 3-D printer I would love to make some crystal models for future outreach lessons.

Next Pebble Pup Meeting

The next Pebble Pups/ Earth Science Scholar meeting is July 11 at the East Library 4:15 PM - 5:15 PM annex due to holiday. August date is pending and may be outside activity due to library rules with messy activities at a local park. Email fossilfun14@gmail.com. Hope to see our pups there. Bring your favorite crystal to share and tell about them with the group.

Keep on Hounding Pups/Scholars! The treasures await!





REPORT
General Assembly
15 June 23

40 hearty rockhounds gathered on a slightly soggy Colorado Springs evening to listen to Dr. Rick Sauers, Curator, Western Museum of Mining and Industry. Rick talked to us about some little known history of Cripple Creek and brought some interesting artifacts for us to examine. Thank you Dr. Sauers! We also welcomed new members and Kyle Atkinson shared his field trip plans for the society. No official business was conducted.

It's That Dang Curiosity Again: the Sulfarsenide Cobaltite — Part I

Mike Nelson
csrockguy@yahoo.com

The important thing is not to stop questioning. Curiosity has its own reason for existing. — A. Einstein

In the April Pick & Pack my article on rouxelite noted the mineral was a member of the Sulfide Class, minerals containing either the sulfide anion S^{2-} or the disulfide anion S_2^{2-}. In the sulfide anion the sulfur has a normal oxidation charge of 2- while in disulfide the sulfur has a reduced oxidation state of 1-; however, since the reduced state sulfur, 1-, is unstable it usually bonds with another 1- sulfur to form a 2- anion. That is why both the sulfide and disulfide anions have a net 2- oxidation charge. As a reminder, if an ion (an atom or molecule with an electrical charge) has more protons than electrons it has a net positive charge while more electrons than protons produce a negative charge (by convention). The formula for sulfides is often written as A_mS_n where *A* is a metal, often iron, copper, nickel, lead, silver, or zinc, *S* is sulfur, and *m* and *n* are numbers indicating cations /anions present. Most rockhounds will recognize the iron sulfide mineral, pyrite—FeS_2. (one positive iron cation (2+ charge) and a 2- disulfide anion (consisting of two bonded and reduced 1- sulfurs). The iron has a net positive charge of 2+ and equals the disulfide with a net charge of 2-. Or perhaps recognize galena, the lead sulfide PbS—one lead cation (2+) and one sulfur anion (2-). Somehow nature makes it all work out even if my mind fails to fully comprehend the action. Have I mentioned before that after three semesters of tough (for me) chemistry I stumbled into finding geology and paleontology! What a blessing.

One of the more interesting and complex group of sulfides are the sulfosalts. These minerals contain: 1) a metal (mostly lead, copper, iron, or silver although a few others, mercury, zinc, vanadium may be present); 2) a semi-metal like arsenic, germanium, antimony, or the post-transitional metal bismuth, or the metals tin or vanadium and 3) sulfur but perhaps selenium or tellurium (Richards, 1999). In case you are wondering, semi-metals are elements with properties both of a metal and of a non-metal and are the following: boron, silicon, germanium, polonium, arsenic, antimony, tellurium, and tennessine (radioactive, artificially produced element). All are interesting elements: each semi-metal takes several different forms (allotropes), but all have at least one form that is shiny and metallic looking. All are solid at room temperature and pressure, and act as nonmetals in chemical reactions. They are poor conductors of electricity (unlike metals) but make excellent semiconductors. Most are malleable and some are ductile. Semi-metals can form alloys with metals and a lead-antimony combination is an important industrial component of batteries and cable sheaths. Most semi-metals are rarely found in the natural state but are common in combination with other elements. For example, silicon is the second most abundant element on our earth (after oxygen) but does not occur uncombined in nature. So, these are the semi-metals and sulfosalts. Interesting? Yes!

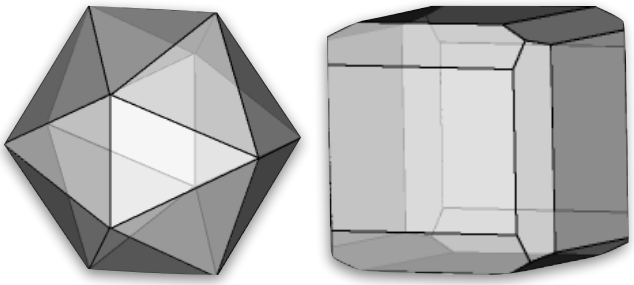
The sulfarsenide minerals are also a group of sulfides with meta(s) plus semi-metal(s) plus

sulfur and therefore must seem related to the sulfosalts. However, there is a big difference in the two groups in that the semi-metal arsenic has moved from a positively charged cation in the sulfosalts to replacing some of the sulfur as a negatively charged anion as in the sulfarsenide minerals arsenopyrite [FeAsS] and cobaltite [CoAsS]. These minerals are interesting in that both use sulfur and arsenic in their reduced oxidation states of 1 minus so cobaltite is $Co^{2+}S^{1-}As^{1-}$. Because the 1- oxidation states for S and As are unstable in solution, their mineral reactions always involve oxidation to some higher oxidation state (https://chem.libretexts.org/). Remember I noted above that in disulfide two unstable 1- sulfurs bond to form S^{2-}. Here arsenic with an unstable 1- charge bonds with the unstable S^{1-} for a combination negative charge of 2-.

I recently acquired a couple of micromounts of cobaltite that exhibit very nice crystals. One specimen is from Håkansboda, Bergslagen Mining District, Sweden, and was, at one time in the collection of Al Kidwell (he of kidwellite fame). As best I can determine the stratigraphy of Bergslagen [part of a Precambrian Shield] is quite complex with original volcanic and sedimentary rocks of Precambrian age [1.8-1.9 Ga] intruded by granite, folded and faulted, and then invaded by hydrothermally emplaced sulfides (pyrite, chalcopyrite, sphalerite, and galena) when the hot fluid interacted with carbonates and mixed with cool seawater in a seafloor environment (Kampmann and others, 2017).

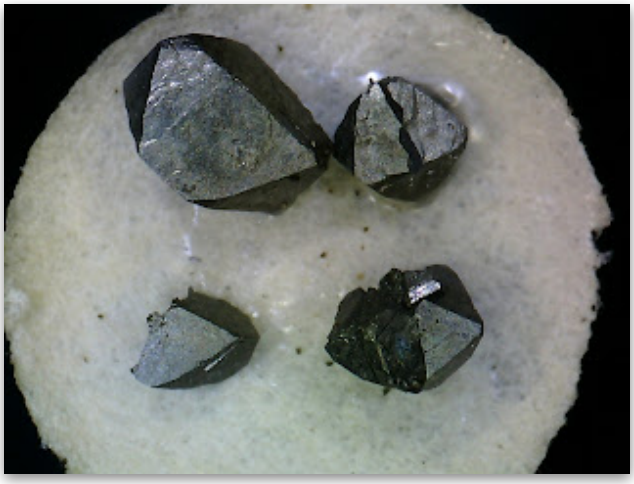
Håkansboda is a very old mining district (at least to U.S. standards) and started sometime in the 1400s but was never a large producer (Falun was the 800-pound gorilla in the region). Tegengren (1914 in MinDat) noted that total copper production from 1613 until 1905 was about 2100 tons with 7 tons of cobalt during 1836-1841. Currently the Håkansboda ore field is under intensive investigations and has shown good potential for copper, cobalt, iron, zinc, lead, silver, nickel, and potentially REE's (Månbro, 2021). Although most cobalt production was a byproduct of copper mining, some cobaltite ore is present and has produced many of the finest crystals in the world.

Above: Cobaltite crystal, Håkansboda, Bergslagen Mining District, Sweden. Width of pseudocubic crystal ~1.5 mm. *Photo: M. Nelson.*



Above: Above crystals are from Palache and others (1944). They indicated that most cobaltite crystals are Isometric [now changed to Orthorhombic Crystal System], commonly are cubic [now pseudocubic - see above] or pyritohedral [now pseudopyritohedral - see below] or modified combinations of these, or granular.

The second micro was collected by a J. Seguin in Ontario, Canada, and mounted in 1973 by Art Smith. I could not locate good information on Seguin and I presume the crystal was collected from the most famous locality in the Cobalt/Sudbury, Ontario, Mining District, the "Brazil Lake occurrence." According to Sabina (1991) cobaltite euhedral crystals measuring up to 3 cm in diameter occur with actinolite amphibolite along the walls of a quartz-dolomite calcite vein containing pyrrhotite and chalcopyrite.



Above: Cobaltite crystals on a micromount stand. Width FOV ~6 mm. *Photo: M. Nelson.*

The Cobalt, Ontario, portion of the District is located northeast of the town of Sudbury and regardless of its name, silver was the major metallic commodity. At one time in the early 1900s the Cobalt area mines were the world's largest producer of silver and total production over the years totaled nearly a thousand tons. The silver was associated with nickel and arsenic minerals like skutterudite.

I was unable to locate exact production figures of cobalt and nickel for the Cobalt area; however, Young and Perrone (2013) noted that "small high-grade deposits of nickel-cobalt arsenides furnish significant quantities of cobalt. Arsenide ores from Cobalt, Ontario, gave Canada world leadership in production for the period 1905-25. Cobalt output from this area stopped in 1971 but was reactivated in 1995 as a primary production center and now seems a major producer.

Stay tuned to the September *Pick & Pack* for cobaltite part II.

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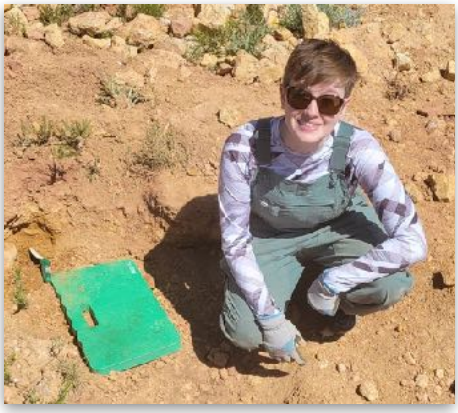
About the Author

Mike is a former University professor and administrator who enjoys outdoor activities, and writing articles for the *Pick & Pack,* other rock and mineral clubs, and the Newsletter of the Rocky Mountain Federation of Mineralogical Societies (www.rmfms.org). He also writes, and occasionally speaks, about members of the Colorado Cavalry/Infantry who participated in the march to Glorieta Pass (1862), helped settle central Kansas (1865), and later fought at Beecher Island (1868). In CSMS he heads up the Undergraduate Research Committee as introducing students to geology research is a long-time passion. But mostly he just tries to enjoy life with frosty IPAs, travel, and collecting mundane facts and pretty rocks/ minerals.



REPORT

Hartsel CO
24 June 23

9 hardy rockhounds had a great day collecting Barite in Hartsel, Colorado. Under bright blue skies, everyone came home with barite. We thank Dave and Lark Harvey for the outstanding collecting opportunities they offer.

Photos and report: Shane Riddle

Unlocking Earth's Mysteries: Ten Ways to Enter the World of Earth Science

By Steven Wade Veatch

1. Live in Colorado Springs where there are lots of rocks to spark your interest. After school, run all over the place with your rock hammer collecting rocks. Go to Ackley's rock shop on North Nevada Avenue with your dad on Saturday mornings. Look at Pikes Peak and wonder what minerals and gemstones are there.

2. Join the Colorado Springs Mineralogical Society (CSMS) at a young age (10). Attend their meetings. Listen to the speakers present programs in the days before PowerPoint—just slides in carousel trays and Kodak projectors. Meet member Richard M. Pearl. Buy all of his books on rocks and minerals (30 of them). Read all of his books. Go on club field trips to Crystal Peak, Spruce Grove Campground, and the Calumet mine near Salida. Become a life member.

3. Have Chris Christensen, a CSMS member, teach you lapidary arts at Palmer High School in the evenings in their adult education program. Repeat the classes over and over so you have access to the machines and Christensen's expertise and jokes (School District 11 will think you have learning issues). Ask Chris to advise you about teaching the Pebble Pups.

4. Meet Mike Nelson (a member of the CSMS), he will give you a cast of a short-face bear skull. This animal once lived in a drafty cave during the Ice Age. This fossil will inspire you. Read all of his articles in the Pick and Pack and try to keep up with his output of manuscripts to the newsletter editor.

5. Take Earth science classes late in your life at Emporia State University. Go to field camp with students 25 years younger than you. Map sedimentary rocks under the hot Kansas sun. Graduate with a degree in Earth science. Invite all your friends and relatives to a party at the Garden of the Gods.

6. Volunteer to work with Herb Meyer at the Florissant Fossil Beds National Monument. He will ask you to contribute chapters to two books published by the Geological Society of America (GSA). He will help you coauthor abstracts presented at several GSA annual meetings. Herb will also take you to a fossil symposium in New Mexico, where you will present a paper.

7. Go on intense field trips with Jo Beckwith from the fossil beds. Crawl through deep chambers of Porcupine Cave and take one week on the couch to recover from exposure to extreme exertion. Meet with Jo for breakfast over many years and discuss archaeology and geology.

8. Submit articles and poems to Bob Carnein of the Lake George Gem and Mineral Club. He publishes one of the finest rock club newsletters in the West. He will edit an endless number of your papers for over a decade. Learn how to improve your writing through Bob. Join him on a multi-year project at the Cripple Creek District Museum to document their mineral collection. Prepare an abstract and make a presentation at a mineral symposium at the Colorado School of Mines that Bob will invite you to.

9. Listen to John Rakowski talk about geology. He will help you with Pebble Pups and take them on field trips. John will show you that what you thought was topaz was really quartz if you use Moh's scale of hardness. He will help you and Bob Carnein on the mineral documentation project at the Cripple Creek District Museum. Attend meetings of the Lake George Gem and Mineral Club with John.

10. Write articles, essays, features, and poems, all of which will deepen your knowledge of Earth science. Submit these manuscripts to John Emery (CSMS member). He publishes the *Pick n Pack*, also one of the finest rock club newsletters in the American West. He takes pride in his work and makes you want to do the same.

Image courtesy of Microsoft's Bing AI Image Creator.
Editorial note: first ever AI image and first ever credit for AI in the Pick & Pack newsletter.

PICK & PACK
THE BULLETIN OF THE COLORADO SPRINGS MINERALOGICAL SOCIETY Published Since 1960

Classifieds and Announcements

John Emery
Editor

Thanks to our contributors. We encourage everyone to submit articles, photos, illustrations or observations.

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

Handwrite it, type it, or email it. Format does not matter. All submissions are welcome. The DEADLINE for items to be included in the next Pick & Pack is the **last day of the month.**

To submit an item:
For hardcopy photos or articles, mail to the address below or bring them to the General Meeting. All hardcopy photos remain the property of the submitter and will be returned. Electronic photos can be submitted at resolutions above 200 dpi in ANY format.

Feature articles can be in MS Word or Mac Pages, preferably NOT pdf.

e-mail to the editor:
csmseditor@hotmail.com Mail to:
Pick & Pack Editor PO Box 2
Colorado Springs, CO 80901

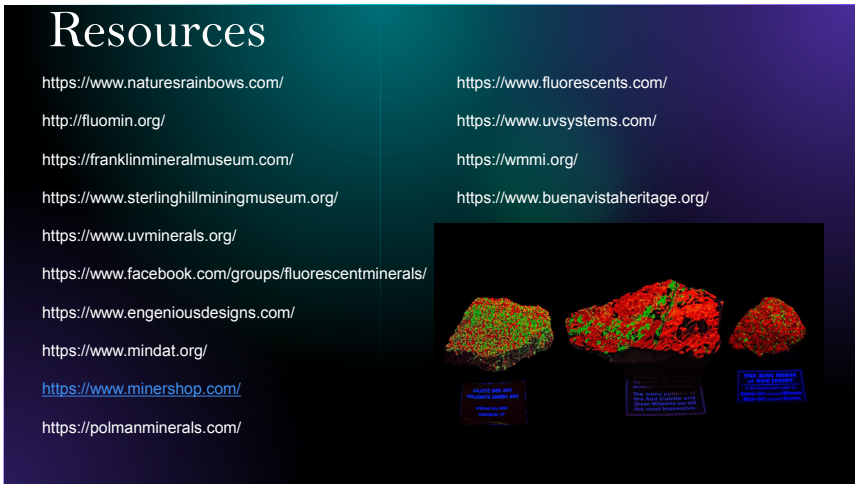
The PICK & PACK is published ten (10) times per year (no issues in January or August). Unless otherwise marked, materials from this publication may be reprinted. Please give credit to the author and CSMS PICK & PACK.

CSMS Summer Field Trip Schedule

Might be subject to change or cancellation due to unforeseen circumstances

July 14th: Dorris topaz claim
15th: Wigwam Claims - Lake George club - limit of 25
~~22nd: Timberline Flourite Mine~~ CANCELLED
22-23: Crystal Park, Montana
29: April Fool's claim
August 5th: New Hope Amethyst Claim - Limit TBA
19th: Smoky Hawk
26th: April Fool's claim
September 2nd: Mt Antero w/ Brian Busse - Limit TBA
9th: Cañon City joining us at our claims
15-17th: Topaz Mountain in Utah
October 7th: Cañon City joining us at our claims
14th: Rocky Mtn High claims
21st: April fools claim
28th: Rocky Mtn High claim

Questions: Kyle Atkinson atkinson.kyl@gmail.com



Above: Resource list for people who want to get into the fluorescent minerals part of the hobby. This is from Brian Walko who has given lectures for various shows and mineral clubs on the fluorescent mineral hobby.

Classifieds and Announcements

TAOS ROCKERS
WAREHOUSE CLEARANCE SALE

3 DAYS - 9 AM-2 PM
JULY 14-16, 2023

CUTTING & CARVING ROUGH
SLABS
DECORATIVE PIECES
BOOKENDS
MINERAL/ROCK SPECIMENS

800 BOND DRIVE, TAOS, NM
0.2 mile east of Walgreens
off Cruz Alta, next to Dahl & Acorn Graphics

CA$H OR CREDIT CARD
Sales Tax included in Price

We're clearing out excess/old inventory
from our warehouse and offering amazing deals

https://www.taosrockers.com/collections

Established 1936
MINERALOGICAL SOCIETY

Pick & Pack
P.O. Box 2
Colorado Springs, CO 80901-0002

CSMS is an incorporated nonprofit organization with the following goals:

- To promote and disseminate knowledge of the earth sciences, especially as they relate to mineralogy, lapidary, and fossils.
- To encourage study, collection, and fashioning of minerals.
- To accomplish the same through social meetings, lectures, programs, displays, shows, and field trips.
- The Pick & Pack newsletter is published 10 times each year to assist and promote the above.

Joining the Colorado Springs Mineralogical Society (CSMS):

- Meetings are held the third (3rd) Thursday of each month, except January & August.
- 7:00 PM at Mt. Carmel Veterans Service Center; 530 Communication Circle, Colorado Springs, CO 80905
- Visitors are always welcome.
- Individuals—$30, Family—$40, Juniors—$15, Corporate—$100.
- Find the application at the web site: www.csms1936.com**.** If you are interested in joining CSMS or would like more information, we encourage you to attend our next General Meeting or visit our web site.

Meetings: CSMS also offers Satellite Group meetings that allow more focused attention in specific areas of our members' interests. Our current Satellite Groups consist of the following: Crystal Study Group, Faceting Group, Fossil Group, Lapidary Group, and Pebble Pups/ Juniors. For details on Satellite Group meetings, check out the calendars on page 2 and the web site.

Membership Benefits: Yearly dues include 10 issues of the *PICK & PACK*, all field trips (additional fees may be required on some field trips, and members are responsible for all transportation to and from), participation in all Satellite Groups (some groups may request additional fees to help cover resource costs), free admission to the *Western Museum of Mining & Industry* (carry your card), a year of learning and enjoyment, plus a lifetime of memories.

Colorado Springs Mineralogical Society is a Member of the following organizations:

- American Federation of Mineralogical Societies (AFMS) www.amfed.org
- Rocky Mountain Federation of Mineralogical Societies (RMFMS) www.rmfms.org