



Colorado Springs Mineralogical Society

Founded 1936

~ Lazard Cahn ~
Honorary President

"Pick & Pack"
Volume 62 No. 4
May 2022



CSMS General Assembly

Thursday, May 19, 2022 7:00 PM
Mt. Carmel Veterans Center

Program Speaker:
David St John

"Our New Digital Microscope"

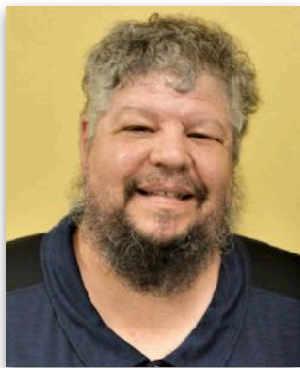


In case of inclement weather please call Mt.
Carmel Veteran's Service Center 719-309-4714

In This Issue ...

Business/ Upcoming Events	2 - 5
Article - S. Veatch, <i>The Castle Rock Quarries: A Building Stone Bonanza (part III)</i>	6 - 12
Pebble Pups/ Earth Science Scholars	13
Poem Submissions	14
Article - M. Nelson, <i>Aenigmatite: The Riddle is Solved</i>	15 - 18
Gem and Mineral Show application	19 - 20
Classifieds & Announcements	21 - 22
Article - O. Price, <i>There's Gold in them thar Trees</i>	23

David St John Presents - new digital microscope



Pebble Pup leader David St. John will be presenting the club's new Digital microscope on the big screen at Mt Carmel. Attendees are encouraged to bring in micro/ small minerals or fossils too try out on the microscope and see on the big screen. You can be a rock star! David will also update us on the pebble pups and earth scholars status and future plans.



Digital microscope. Illustration only. Actual microscope might not look like this microscope. Join us if you want to see the actual microscope. Bring a sample.

Tentative Field Trips

May 21 - 26 Marges Utah Trip
May 28 - Club Claim
June 28 - Club Claim
July 2 - Barite Claim
July 9 - Club Claim
July 16 - Smoky Hawk Mine
August 6 - Topaz Mountain
September 10 - Mt Antero
September 24 - Club Claim

For questions contact:
atkinson.kyl@gmail.com
(Kyle Atkinson)



CSMS Group Calendar

May '22 Jun '22

3 May	7 Jun	Fossil Group	1st Tues	6:00 PM	East Library	Jerry Suchan	303-648-3410
5 May	9 Jun	Board Meeting	1st Thur	6:00 PM	Zoom	John Massie	719-338-4276
19 May	16 Jun	Pebble Pups	3rd Thur	5:30 PM	Mt. Carmel Center	David St. John	719-424-9852
19 May	16 Jun	General Assy	3rd Thur	7:00 PM	Mt. Carmel Center	John Massie	719-338-4276
26 May	23 Jun	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

CSMS Club Events

June 10-12: Pikes Peak Gem, Mineral and Jewelry Show, Norris Penrose Event Center, Colorado Springs. Friday, June 10, Noon - 7:00 PM, Saturday, June 11, 10:00 - 5:00, Sunday, 10:00 - 4:00. Adults \$5.00/ Multi-day \$8.00/ 12 and under free. The theme of this year's show is **barite**.

Community Events (P. Modreski)

June 10-12: Pikes Peak Gem, Mineral and Jewelry Show, Norris Penrose Event Center, Colorado Springs. Friday, June 10, Noon - 7:00 PM, Saturday, June 11, 10:00 - 5:00, Sunday, 10:00 - 4:00. Adults \$5.00/ Multi-day \$8.00/ 12 and under free. The theme of this year's show is **barite**.

June 16: Victor Gem and Mineral Show // Thursday, June 16 - set-up; Show June 17 to 19, 2022. For additional information contact RuthZalewski.info@stcfg.com 719-689-2675 or 719-651-2714.

May 19: 7:00 PM, Colorado Scientific Society meeting, all welcome, in person or by Zoom: "Structural Geology and Geological Exploration in the Indo-Burmese Ranges of NE India; Deformation along a collisional/transform plate margin," by Daniel Schelling, Structural Geology International, LLC. The in-person meeting is at the Colorado School of Mines, Berthoud Hall, room 241. All are welcome – no admission charge.

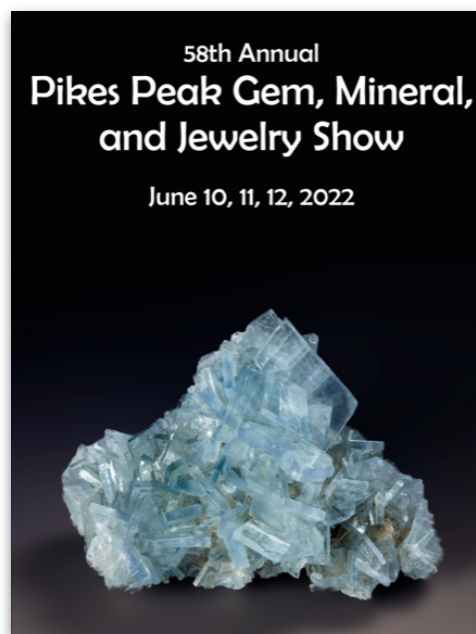
6:30 PM – Social time at in-person meetings

6:45 PM – Join Zoom meeting

7:00 PM – Meeting and Program begin

See the CSS website for details, abstract, and link to the Zoom meeting: <https://coloscisoc.org/>

May 21: Colorado Chapter, Friends of Mineralogy, Silent & Verbal Auction. All are welcome; 12 noon to 4:30 PM (checkout begins at 3:30 p.m.); seller setup at 11 AM. New location: Wheat Ridge United Methodist Church, 7530 W. 38th Ave, Wheat Ridge [turn right onto Vance St; parking is behind the building]. More details will be sent by email and will be available on the FMCC website, <https://friendsofmineralogycolorado.org/>



Muddy Creek blue **barite** from Rio Grande County CO. Collector: Marge Regel. Photo by Mark Jacobson. Modified by Bob Germano. **Barite** is the theme of the show.



Secretary's Spot

John McGrath

2022 CSMS Officers

John Massie, President
Rick Jackson, 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

2022 CSMS Chairpersons

Rick Jackson, 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

CSMS General Assembly Minutes

Mt. Carmel Vet Center, Thur Jan 20, 2022 7:00 PM

Address: 530 Communications Circle, Colorado Springs CO 80905

Board Attendance: President: John Massie, Past President: Sharon Holte, Member-at-large: Chris Burris, Vice President: Richard Jackson, Member-at-large: Bill Meyers- Present
Treasurer: Ann Proctor, Secretary: John McGrath, Membership Secretary: Adelaide Bahr

Agenda:

1. Meeting was called to order by our President John Massie at 7:02 PM
2. The Pledge of Allegiance was led by President John Massie
3. Introduction of Guests: The Applequists - CJ, Joe and Diane
4. Introduction of New Members: Dan C. Mira who has already been out digging with Chris Burris and found a beautiful ammonite
5. Program Speaker introduced by VP Rick Jackson - Danielle Olinger, USGS, speaking on Rare Earth Elements, Fluid Inclusion Project.
6. Meeting - There were 30 members in attendance and 6 minerals were given out.
7. Officer Reports
 - A. President - John Massie
 1. Reported that the Fossil Group will have its next meeting on May 3 at the East Library on Union. The meeting begins at 6 pm
 2. Reminded all that the Pikes Peak Gem, Mineral and Jewelry Show will run from 10-12 June, 2022 at the Penrose Center. Set up will occur on 09 June. He encouraged members to pass out Show cards and to sign up for working at the Show.
 3. Presented Betty Merchant with a plaque for her work with the Pebble Pubs over many years. Ann drafted Betty for work at the Show.
 4. Introduced information on display cases. He noted that the application for these cases is in the Pick and Pack.
 - B. Vice - President - Rick Jackson - Reported that Dave St John is going to give a presentation on the use of the new microscope at the next meeting in June.

C. Treasurer Ann Proctor- reminded everyone about the CSMS T-Shirts that are on sale.

D. Secretary John McGrath - no report

E. Membership Secretary - Adelaide Bahr - No report

F. Editor - John Emery - Absent

G. Members at Large

1. Bill Meyers - no report

2. Chris Burris, no report, but did display his backlit and ammonite. Both found "in Colorado Springs."

H. Past President - Sharon Holte - no report

I. Website and Show Coordinator - Lisa Cooper, absent

8. Satellite Groups

A. Crystal Group - Kevin Witte, absent, but there is a meeting planned for the upcoming Thursday.

B. Faceting Group - John Massie reported that he is scheduling the use of the faceting machine. He will train the basics and then loan the machine for 30 days.

C. Pebble Group - David St John, present, demonstrated the new microscope and he announced that he has a sample of a meteorite that was donated to the club.

D. Fossil Group - next meeting May 3 at the East Library

E. Jewelry Group - still in need of a Chairperson

F. Lapidary Group - Sharon Holte, no report.

9. Liaisons

A. Claims - Frank Rosenberg, Absent

B. Field Trip Coordinator - Kyle Atkinson, absent

C. Social Coordinator - Mark Schutz, thanked everyone for the excellent quantity and variety of treats at the meeting.

D. Store Keeper - Ann Proctor, no report

E. Unfinished Business

F. Mineral Show - volunteers and distribution of Show cards needed.

10. New Business

A. A Member reported that many people at multiple Shows have commented on the excellence of the Pick and Pack. John McGrath transmitted this praise to John Emery who was absent.

B. Door Prize Drawing - 6 minerals were given out

11. Meeting adjourned by President John Massie at 8:27 pm

Respectfully Submitted

John M McGrath MD COL (RET) USA



President's Corner

John Massie
CSMS President



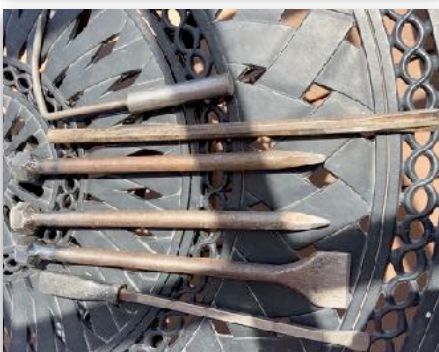
2022 Satellite Group Chairs

Kevin Witte/ Bob Germano, Crystals
John Massie/ Bertha Medina, Faceting
Jerry Suchan/ Joy Price, Fossils
Vacant, Jewelry
Sharon Holte, Lapidary
Vacant, Micro-mount
Vacant, Photography
David St. John/ Hair/ Elick, Pebble Pups

2022 Liaisons

Florissant Fossil Beds National Monument:
S.W. Veatch

Western Museum of Mining and History:
S.W. Veatch



Presidential Matters



A message from CSMS President John Massie:

I hope everyone is ready for some good field trips this summer.

Still looking for volunteers to work some short shifts at the Pikes Peak Gem and Mineral Show on June 10, 11 and 12. With set up on the 9th. Remember members of CSMS pay to get in unless they volunteer to help with the show. I will have sign up sheets at the meeting for volunteers to sign up for various jobs.

At the May 19th meeting we will have a silent auction of digging tools that were donated to the club. The proceeds will go to our general fund. See the pics below.

John Massie
CSMS President





Federation News Post

American Federation of Mineralogical Societies
Rocky Mountain Federation of Mineralogical Societies



American Federation Rockhound Information

- [William Holland School of Lapidary Arts \(Young Harris, GA\)](#)
- [Wild Acres Retreat \(Little Switzerland, NC\)](#)
- [Bureau of Land Management](#)
- [Crystallography](#)
- [U.S. Geologic Survey Topographic Maps](#)
- [TopoZone](#) - Topographic maps of the U.S. online



VIVA LAS VEGAS ROCKS
June 17 - 19, 2022 at the Orleans Hotel

Rocks, Gems & Jewelry Show
Presented By
Southern Nevada Gem & Mineral Society

Hosting The Rocky Mountain Federation & Mineralogical Society Conference

Daily
Admission 5.00
Children Under 12 Free
Tickets Entered in Drawing

Exhibition Hours:
Friday 9am to 4pm
Saturday 9am to 4pm
Sunday 9am to 2pm

Orleans Hotel & Casino
Reservations
800 675-3267
ID: ASN2C06

50+ Vendors
Displays
Speakers

Raffles
Kids Activities
Door Prizes

Silver State

Special Contacts:
sngmpresident@gmail.com
sngmshowchair@gmail.com
www.sngmshow.org

Local Club Shows

- Notify other clubs in our federation about your upcoming show, [email the editor](#)
- For Member Club Show general information go to the [RMFMS Club Lists](#) page and check the club or city you are interested in.
- Want to see the shows in your state? Visit the Rock and Gem Magazine's Show page and select the state you are interested in: [Rock and Gem Magazine's Show Page](#)
- Please use the following link to the RMFMS Editor Google Drive to download the Rocky Mountain Federation News: [RMFMS Editor Google Drive](#)
 - The RMFMS Newsletter is also available at [RMFMS.org](#)

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.

The Castle Rock Quarries: A Building Stone Bonanza

Part 3 of a 3-part article by Steven Wade Veatch

Buildings Made of Castle Rock Rhyolite

Castle Rock Rhyolite built many 19th and early 20th century buildings in Colorado, and a few survive today. Many historic buildings in the town of Castle Rock were built with the local rhyolite. These include the Cantril School, built in 1896; the St. Francis of Assisi Catholic Church, built in 1888 (now Scileppi's at the Old Stone Church Restaurant); and the Douglas County Courthouse built in 1890 (destroyed by an arsonist in 1978).



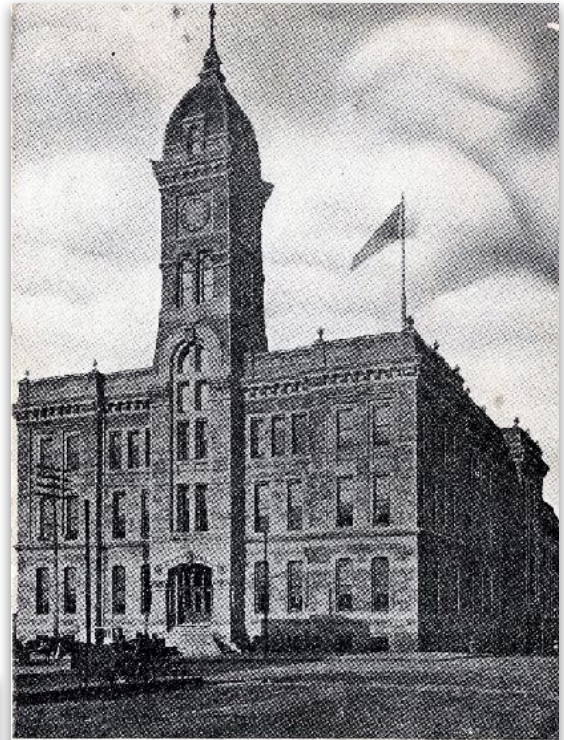
Fig. 15: Castle Café. Built with local rhyolite blocks. *Photo date 2021 by S. W. Veatch.*



Fig. 16: Cantril School built in 1896 with Castle Rock Rhyolite. *Photo date 2021 by Ben Elick.*



Fig. 17: St. Francis of Assisi Catholic Church built in 1888 with rhyolite (now Scileppi's at the Old Stone Church Restaurant). *Photo date 2021 by S. W. Veatch.*



City Hall, Denver, Colo.

Fig. 18: The old Denver City Hall was built with Castle Rock Rhyolite. This image shows the three-story building with a clock tower. *From the postcard collection of S. W. Veatch.*



Fig. 19: The Kittredge Building, located at 511 16th Street, Denver, Colorado. It was one of the first buildings in downtown Denver to have an elevator. *Photo date July 2009 by Jeffrey Beall, Permission to use through Creative Commons license.*

Castle Rock Rhyolite was used in a large number of buildings in Denver. Denver's first city hall, once located at 14th and Larimer Streets, was built in 1886 with the rhyolite. The city demolished the building in 1936.

The lower two floors of the Kittredge building (at 16th and Glenarm Place) are Pikes Peak Granite, while the top five floors are Castle Rock Rhyolite. Boston architect Henry Hobson Richardson designed

this building, and it is a good example of the Richardsonian Romanesque style of architecture popular in the late 1800s. It features rounded arches and ornate carvings on the cornices and turrets (Murphy, 1995).

The Trinity United Methodist Church (at 18th and Broadway), with its remarkable stone steeple, was built in 1887 with Castle Rock Rhyolite (Murphy, 1995). The church is considered one of the greatest building projects of Denver architect Robert Roeschlaub (Murphy 1992). He

was the architect for several downtown Denver commercial buildings from the late 1870s to the first few years of the 20th century.

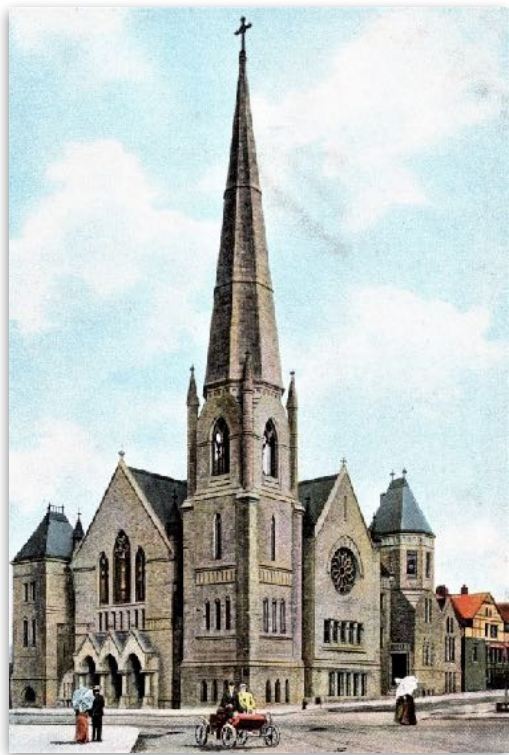


Fig. 20: Trinity Methodist Church at 18th Street and Broadway in Denver is built from Castle Rock Rhyolite. *From the postcard collection of S. W. Veatch.*

Horace Tabor built the Tabor Grand Opera House at 16th and Curtis Streets in Denver and adorned it with Castle Rock Rhyolite. It opened in 1881 and was demolished in 1964.

Many fashionable mansions in Denver's Capitol Hill neighborhood, including the Molly Brown residence, were built with rhyolite. Wilbur S. Raymond, an investment banker, built an ornate mansion known as the Raymond House (Castle Marne) in 1890. William Lang was the architect and built the mansion mainly from Castle Rock Rhyolite. It has a five-sided corner bay, elaborate cornices, and a steeply pitched roof.

The Adolph J. Zang House, also referred to as the Gargoyle House, was built in 1889 in a Gothic-Romanesque architectural style by architect William Lang. Lang is known for his use of turrets,



Fig. 21: View of the Tabor Grand Opera House at 16th and Curtis Streets in Denver. Castle Rock Rhyolite was used in its construction. *From the postcard*



Fig. 22: The Molly Brown House, 1340 Pennsylvania Street, Denver, was built in 1899. The mansion is attributed to architect William Lang. It is a mixture of red sandstone and dove-colored Castle Rock rhyolite. Margarete "Molly" Brown survived the sinking of the RMS Titanic. *Photo date 1995 by S. W. Veatch.*

columns, gargoyles, rhyolite, and other polychromatic stones. Adolph Zang owned a brewery and had mining interests in Cripple Creek.



Fig. 23: The Raymond House (Castle Marne) at 1572 Race Street, Denver is built largely of Castle Rock Rhyolite. Photo date July 2009 by Jeffrey Beall, permission to use through Creative Commons license.



Fig. 24: The Zang House is located at 1532 Emerson Street, Denver. Photo date July 2009 by Jeffrey Beall, permission to use through Creative Commons license.

The Russell and Elinor Gates Mansion was built in 1892. Gates was a successful merchant. The house is an excellent example of the Richardsonian Romanesque style with distinctive stone arches in the lower story.



Fig. 25: The Gates Mansion, at 1365-1375 Josephine Street in Denver, Colorado. Photo date July 2009 by Jeffrey Beall, permission to use through Creative Commons license.

In Colorado Springs, the First Congregational Church was constructed in 1874 with Castle Rock Rhyolite. Several buildings on the Colorado College campus were also built with stone from a Castle Rock quarry (Jacobsen, 2014). The Union Printer's Home is almost entirely built with Castle Rock Rhyolite. General Palmer also used this material when he built the first Antlers Hotel.

Fig. 26: First Congregational Church, in Colorado Springs, was built with Castle Rock Rhyolite. Postcard circa 1918. From the S. W. Veatch postcard collection.

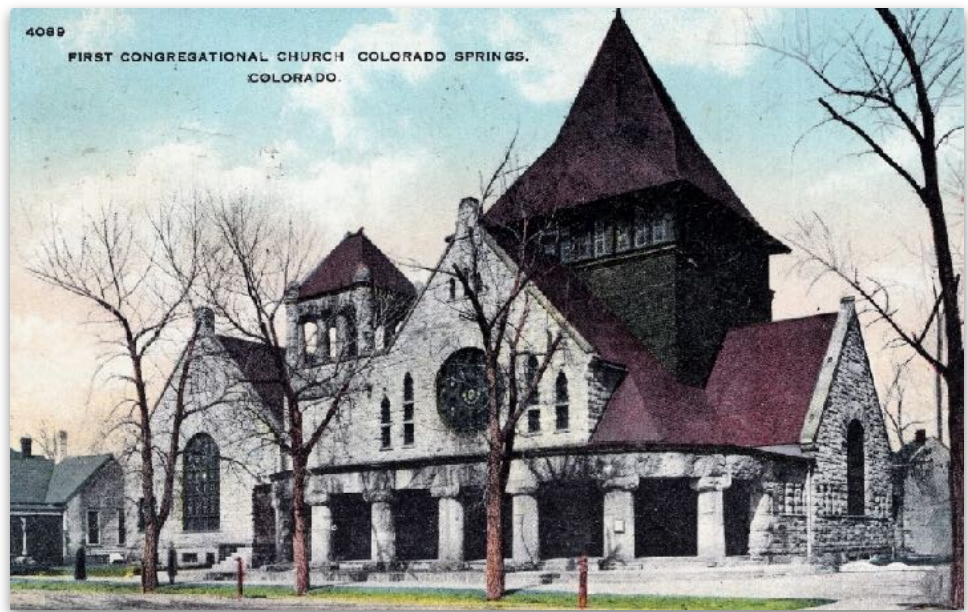
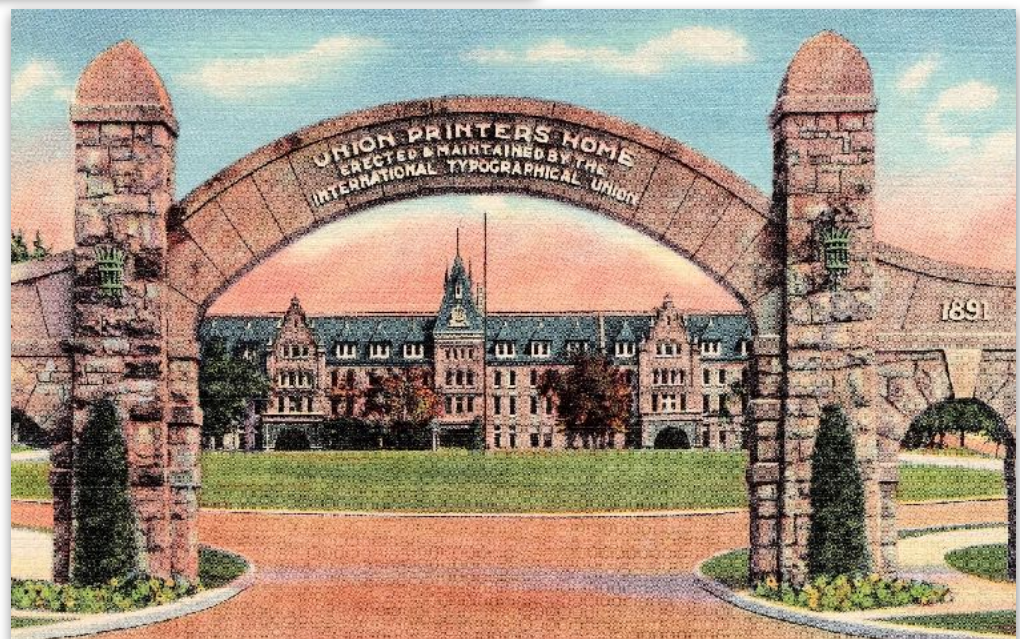


Fig. 27: Montgomery Hall, Colorado College. Tudor Revival style 1891 with Castle Rock Rhyolite. Photo date circa 1906. From the S. W. Veatch postcard collection.

Fig. 28: Union Printers Home, at 101 S. Union Blvd, Colorado Springs, Colorado. Built in 1892 with Castle Rock Rhyolite. From the S. W. Veatch postcard collection.



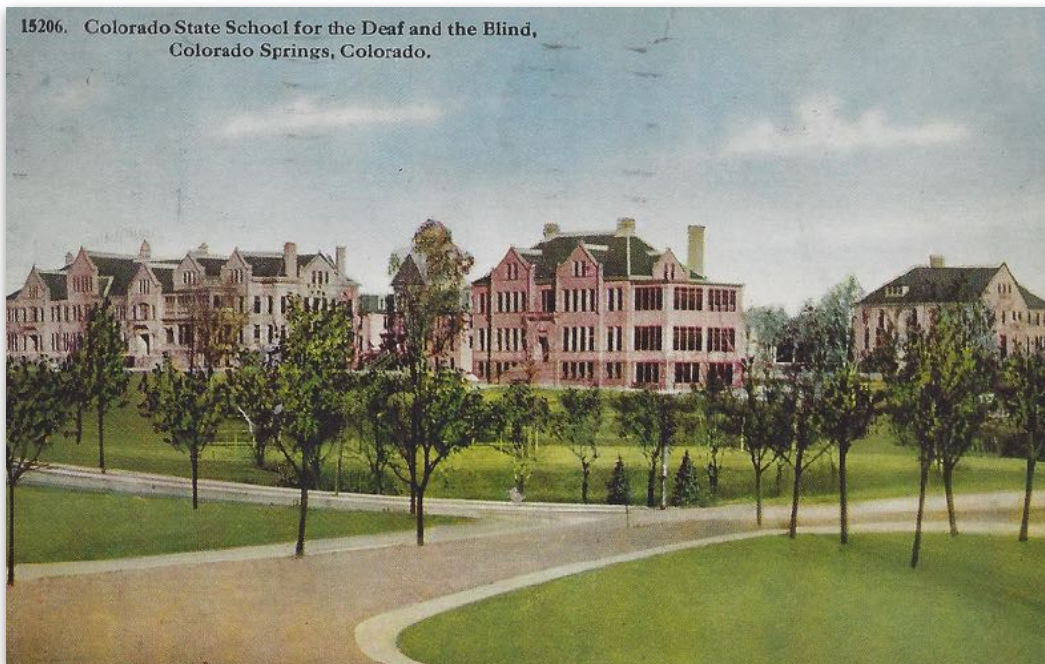


Fig. 29: The Colorado School for the Deaf and the Blind was established in Colorado Springs in 1874. Castle Rock Rhyolite was used in the construction of some of the buildings. The school continues to serve deaf and blind students in Colorado. *From the S. W. Veatch postcard collection.*



Fig. 30: The original Antlers Hotel in Colorado Springs opened in 1883. The hotel was built by William Jackson Palmer with Castle Rock Rhyolite from the Madge quarry. The hotel burned down in 1898. Photo circa 1893 by Detroit Publishing Company. *Photograph is public domain.*

Conclusion

Although Silas Madge did not find any gold on his ranch, he found rhyolite. The demand for the rhyolite as a building stone was high, and three main quarries produced stone between 1872 and 1906. Castle Rock became a boomtown thanks to the quarries.

As one of the commonly used building stones used in the late 1800s, rhyolite was an important construction material of many Colorado buildings, and was shipped to Omaha, Cheyenne, and Kansas City (Murphy, 1992). A number of Colorado's historic buildings, built with stone from Castle Rock quarries, still stand today.

Acknowledgments

I thank Ben Elick for preparing and modifying the map used for this paper and for obtaining photos of Castle Rock Rhyolite. I thank Shelly Veatch and the Colorado Springs Oyster Club critique group for reviewing the manuscript, and Dr. Bob Carnein for his valuable comments and help in improving this paper.

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Thorson, J. P. 2005, Geologic Map of the Castle rock north quadrangle, Douglas County, Colorado. Open-File Report 05-2. Colorado Geological Survey, Division of Minerals and Geology Dept. of Natural Resources Denver, CO.



May meeting is the 19th at Mt Carmel Veterans Center 530 Communication Way at 5:30 - 6:15 PM. The topic this month is “Rockhounding in the Great Lakes” with examples and shoreline collecting. We will have real experiences to share and input from Steven Wade Veatch that resides in Michigan now. Hope to see you at the meeting.

April meeting last month was about crystal and gems and our debut of the new digital microscope. The microscope can take pictures and video and be used on TV, and large screens. Everyone was amazed at the details and crystals that could not be seen easily with normal vision. We had a special guest Betty Merchant that was awarded for her years of dedicated service with the pups and scholars. Betty shared her crystal shapes and models with the group. She is a gift that continues to give. The microscope was a big hit and will be part of the presentation by the pups team in the general meeting in May. The free samples were special this time and handouts promoted the lesson. April is Poetry Month that our club supports and submitted to local newspapers and state and national competitions thanks to Steve. Look for more in May.

We need sample donations and volunteers for the upcoming show June 10,11,12. Please contact David at fossilfun14@gmail.com or cell 719-424-9852.



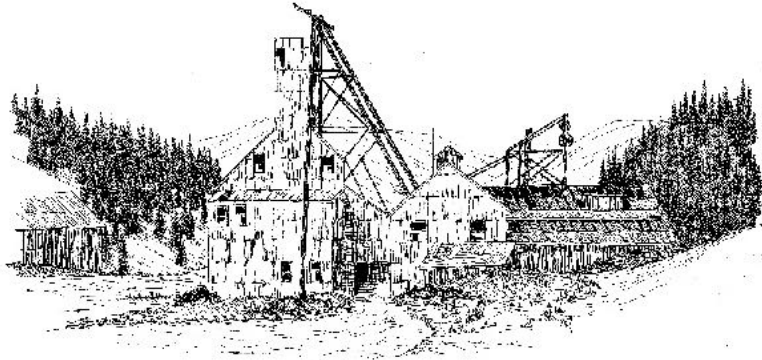
Happy Stegosaurus Day! 40 years since the Stegosaurus was designated a state fossil/dinosaur in Colorado.



Headframe

By Gavin Seltz

Lifting gold ore up
Dropping miners down
Cripple Creek or Bust



The headframe of the historic Cresson mine, Cripple Creek, Colorado.
Artwork by Gene Mourning, courtesy of the Western Museum of Mining and Industry.



Theiophytalia a plant-eating dinosaur found at the Garden of the Gods, Colorado Springs.
Photo: S.W. Veatch

Dinosaurs

By Koley Riddle

Dinosaurs are old.
Have we found any?
Only fossils and footprints
of stone. I wonder if any still exist?
I don't think so, but I would still like
to see one.



Footprints of a dinosaur found at Dino Valley State Park, Glen Rose, Texas.
Photo: S.W. Veatch

Footprints

By Mike Hair

Vanished step by step
Remnants of monsters, time gone
Giants, now just echoes.



Aenigmatite: The Riddle is Solved

Mike Nelson
csrockguy@yahoo.com

*April, dressed in all his trim,
Hath put a spirit of youth in everything*

- Wm. Shakespeare, Sonnet 98



*Bright vibrant sunshine.
Wild, showy flowers spring,
into the desert*

- The rockguy, 2022

ENIGMA

1. puzzling or inexplicable occurrence or situation
2. person of puzzling or contradictory character
3. a saying, question, picture, etc., containing a hidden meaning

- Courtesy dictionary.com

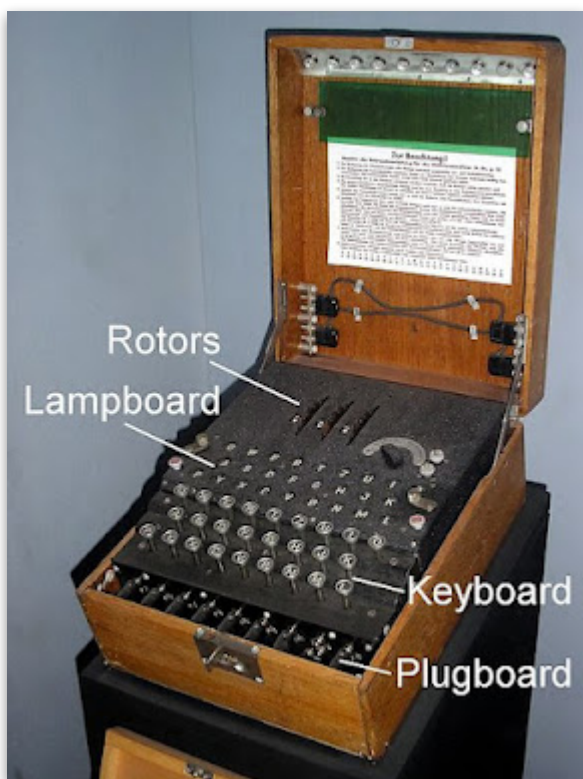
As a kid I was not really interested in puzzles (jigsaw or crossword) or riddles but was a voracious reader. Unfortunately, I still am not interested in puzzles, especially sudoku, although friends inform me that they are good for brain health! Is that true? Don't know! What I do know is that my reading

habits have served me well since childhood and are still a joy today. My current play list includes a series of books written by the British naturalist Gerald Durrell, rereading *River Horse* (William Least Heat Moon), and a new bio on Jim Bridger. In addition, throw in the journals like *Rock and Gem*, *Min Record*, and *Rock and Minerals*, as well as a slew of club newsletters, and my brain is busy being a lifelong learner. In a final bit of trivia, Least Heat Moon and I were co-presenters at an undergraduate research symposium and shared a cold IPA together one evening (we talked about old maps).

My early reading also got me interested in cryptography, and in an enigma, no not a riddle nor the band but a cipher machine used extensively by Nazi Germany during World War II. These devices used algorithms to code, and ultimately send via wireless, messages to the military units who in turn had an identical machine to read the code and then use a key to decipher. A very simple encryption might use the key "shift 6." So, MJXE could be sent and translated to ROCK as can be seen from shifting letters in the second line.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
V W X Y Z A B C D E F G H I J K L M N O P Q R S T U

Now, the Nazi Enigma Machine was much more complicated than this simple example (termed a Caesar Cipher) and was used extensively to send secure encryptions, top-secret information---or so the Nazis thought. It turns out that a group of Polish cryptologists, working with British colleagues out of the famed Bletchley Park, "cracked the Enigma cipher" and substantially shortened the war effort (perhaps 2-4 years) and perhaps even "won the war" for the Allies. The code breaking at Bletchley Park remained classified information until the 1970s.



Above: An Enigma Machine at the Imperial War Museum, London. Photo: Public Domain courtesy of Karsten Sperling.

Back to my kiddiehood---simple encryptions (Caesar Ciphers) were an important part of our boyhood games. Each play day the “code” would change from “shift 6 to shift 3” etc. Some days the code would be written with lemon juice and the paper needed heat to allow the juice to turn a brown color so it could be read. At other times our teachers would use encryptions as a learning tool—the code shift today is $(6+3) \times 2 (\div 3)$. In looking back, I learned much without the use of computers and other electronic gizmos just as Ralphie did in the movie *The Christmas Story*—“Be sure to drink your Ovaltine” coded out on his secret decoder ring. Actually, it was a decoder pin and if this mundane bit of trivia confuses you, see the movie.

But back to the mineral of the day. Aenigmatite was named in 1865 and mineralogists were uncertain of its chemical

composition, an enigmatic situation, a riddle, and thus the name. Aenigmatite ranks very high on my list of the best derived mineral monikers.



Above: Aenigmatite, length of crystal 3 cm. Collected from Mt. Eveslogchorr, Khibiny Massif, Kola Peninsula, Russia.

I purchased this specimen of aenigmatite shown above since: 1) it was a beautiful prismatic crystal; 2) it was one of those strange, igneous, silica-poor, aluminum-poor, sodium-rich minerals that often occurs with aegirine-augite, astrophyllite, arfvedsonite, riebeckite, hedenbergite, fayalite, and ilmenite in alkaline volcanics and pegmatites. Good exposures of these rocks seem to occur in exotic localities with unpronounceable names such as the Ilimaussaq intrusion in Narssarssuk, Greenland, and the Khibiny and Lovozero

massifs, Kola Peninsula, Russia. These are places where the average rockhound will lack access for collecting! However, there might be a collecting locality closer to home? MinDat noted (7 December 2021) that aenigmatite was known from the Mt. Rosa Granite (a sodic igneous pluton), part of the greater Pikes Peak Batholith (~1.08 Ga) near Colorado Springs. Unfortunately, MinDat did not provide photos. Since Eckle, in his tome on minerals of Colorado (1997), did not recognize aenigmatite from Colorado, I presume the MinDat information came from a thesis by Livingston (2020) who stated,

Diverse lithologies are associated with emplacement of the complex; these included peraluminous to peralkaline granitic rocks with several associated minor rock types, such as various dikes and pegmatites. Recent geologic and geochemical studies of the complex revealed the Mount Rosa Granite to have a complex petrogenesis within the pluton. This granite is host to complex Ti-bearing minerals, astrophyllite $[K_3Fe^{++}7Ti_2Si_8O_{26}(OH)_5]$ and aenigmatite $[Na_2Fe^{++}5TiSi_6O_{20}]$, which are noted to represent highly peralkaline rocks....

At any rate, aenigmatite is a fairly rare mineral found only in these complex alkaline rocks.

Aenigmatite, $Na_4(Fe_{10}Ti_2)O_4(Si_{12}O_{36})$, is a sodium, iron, titanium silicate with a black to dark brown color and an adamantine to greasy luster. On first glance, it appears opaque but with a strong back light some crystals are translucent. The streak is reddish brown while the hardness is ~5.0 to 6.0, call it 5.5. It is quite brittle with an uneven fracture.

The photos on MinDat seem to indicate that most crystals are pretty ugly prisms, often short and stubby, and rough or pitted in

appearance. I was concerned that perhaps my specimen was misidentified until: 1) a MinDat photo of nice shiny, striated and terminated crystal collected from the Azores (Portugal) looks very similar to mine; and 2) Rock Currier, in a MinDat *best of* article stated “sometimes black, well developed prisms to 10 cm are found (sometimes striated) frozen in the alkaline rocks of the Khibiny Massif... Boots Cureton says he has had specimens from there that were confirmed by microprobe that were sharp bladed, black, prismatic and striated to 4 cm.” Two labels on my specimen indicate it was collected from Chibiny, Kola Peninsula. So, I will go with those identifications, and a second enigma was solved!

As I started this May *Pick & Pack* article in early March, I was always stepping outside to view the waxing moon and finally on March 18 the Full Worm Moon popped over the Superstition Mountains at Lost Dutchman Campground near Apache Junction, Arizona. The name came from worm casts that appeared in late winter as the ground thawed and signaled the coming of spring, In fact, the Vernal Equinox was celebrated a couple of days later on March 20. As I attempt to finalize this manuscript, I am still attuned to the Lunar Cycle. The April new moon just finished (April 1) and the first tiny smiling face of the waxing April moon has appeared. I will watch it nightly until the Full Pink Moon, named for the early blooming of the phlox flowers, appears on April 16. In addition, the lunar dates noted here are quite important in the ecclesiastical world. In 325 A.D., the Council of Nicaea outlined the basic principles of Christianity. In addition to principles, the Council decided that the Christian celebration of Easter would be observed on the Sunday following the first full

moon that appears on or after the Vernal Equinox (the established ecclesiastical equinox which may vary from the astronomical equinox). But there is an exception—Protestant and Catholic Christians follow the Gregorian Calendar, adding a leap year every four years to offset the time difference between a lunar year and a “normal” calendar” year. The Eastern and Oriental Orthodox Christians follow the old Julian Calendar which started on January 1, 43 BC, and consists of three years of 365 days and then one year of 366 days. So, you say. That sounds like a “normal” calendar year as noted on my free insurance company calendar hanging on the refrig! What the insurance company does not tell you is that leap years must be evenly divisible by 4 except that a century year (like 2000) is never a leap year unless it is devisable by 400. In addition, any year evenly divisible by 4000 is never a leap year. The Orthodox churches celebrate Easter on the Sunday following the first full moon occurring after the Jewish holiday of Passover. There certainly are other calendars such as the Islamic Calendar which traces its origin to 622 AD and consists of 12 lunar months in a year of 354 or 355 days. The Gregorian Calendar is a now the calendar dominating most of the secular and business world. As for me, I just watch the different phases of the moon as they appear on a pretty regular basis.

Igneous pluton.
A rare aenigmatite forms,
Rich in sodium.

- The rockguy, 2022

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Pike's Peak Gem & Mineral Show

Presented by the Colorado Springs Mineralogical Society

June 10-12 2022, Norris Penrose Event Center, 1045 Lower Gold Camp Rd, Colorado Springs

Fri 12 PM - 7 PM, Sat 10 AM - 5 PM, Sun 10 AM - 4 PM

Request for NON-COMPETITIVE Display Space

Name:

Society:

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Address:

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Phone:

Email:

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City:

State:

Zip:

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Describe display or cases:

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<input type="checkbox"/>	I will bring my own display	Your case length:	# of cases:
<input type="checkbox"/>	I will need a case*	Case size desired:	# of cases:

* CSMS cases are approximately 36" by 24" outside measurements. A few 4-foot cases are generally available. There is a hasp on the case that accepts an exhibitor-supplied padlock.

Exhibitors are urged to bring their own cases. A limited number of club cases are available upon request. Exhibitors using club cases will need to furnish any risers, linings, padlock or accessories as needed. EACH CASE WILL BE LIMITED TO 150 WATTS.

Setup is from 1 PM to 8 PM on Thursday June. 9 or 8 AM to 12 PM on Friday before the show opens. Note new show hours for Friday. Tear down is 4 PM to 8 PM on Sunday.

Return by mail or email by June 1st to reserve a case and exhibit space. After June 1st, exhibitors are still welcome based upon availability of cases and space. Return to: Bob Landgraf, 304 Palmer Trail, Manitou Springs, CO 80829 719-658-1364 rmlwp74@aol.com

Presently we are only looking at People's Choice award for best case for judging.

Signature of Non-Competitive Exhibitor: _____

With the signing of this request, email submission of this document or showing up with an exhibit, it is mutually agreed that the Colorado Springs Mineralogical Society and the Norris Penrose Event Center shall not be liable to any exhibitor for damage, loss or destruction of any exhibit or injury to his person for any cause and all claims for injury are expressly waived by the exhibitor.

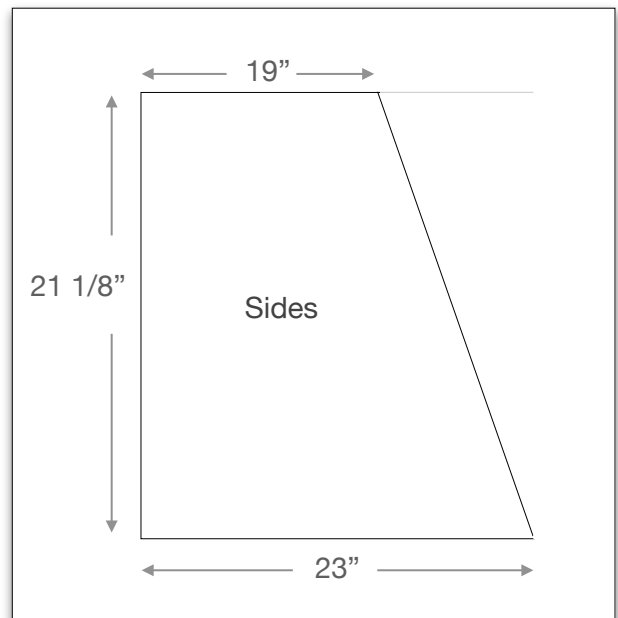
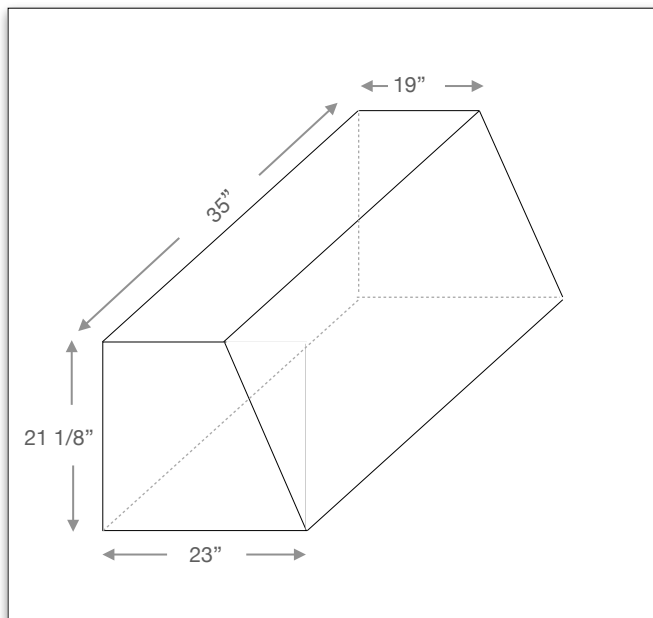
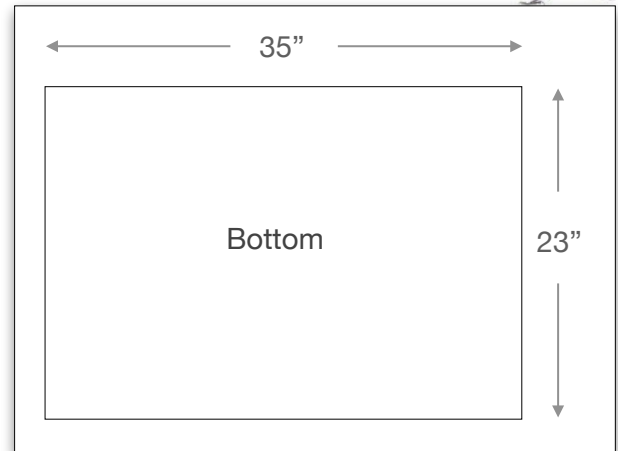
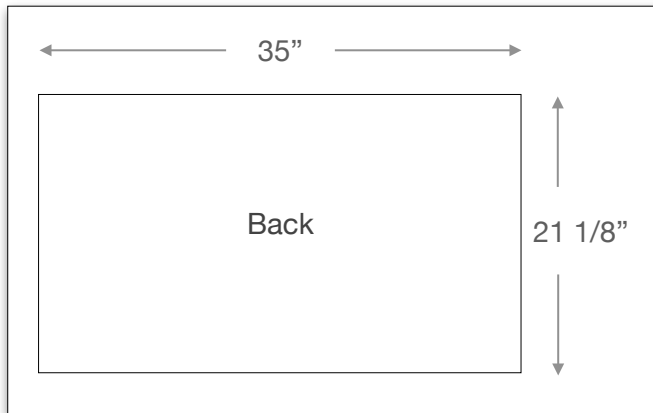
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The Colorado Springs Mineralogical Society Case



All measurements are inside measurements. However, since all cases are handmade there may be some slight variations in the cases. Be sure to bring any necessary tools required to make adjustments to your liners. Also remember to allow for thicknesses of your liners to make the final fit.



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.

Chairperson Vacancies

We have two chairperson positions vacant. Please consider volunteering for these fun and rewarding club positions.

(Additional) Federation Representative (Club Chairperson)

- Liaison to the American Federation of Mineralogical Society (AFMS) and the Rocky Mountain Federation of Mineralogical Society (RMFMS)

Science Fair Chair (Club Chairperson)

- Help junior members participate in Science Fairs Contact CSMS President John Massie, jsmassie1075@gmail.com if interested in any of these positions.

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Silent Auction

19 May 22

General Assembly (see calendar)



Classifieds and Announcements

Field Trip: Utah with Marge Regel

May 21-26, 2022

Contact: marjory.regel@yahoo.com 719-650-8148



Itinerary - 5 different areas

1 day: Grand Junction – Book Cliffs barite

2 days: Yellow Cat - agate, redwood, and barite pseudomorphs, and black/white wood

2 days: San-Rafael Swell area - celestine, grape agate

1 day: Crystal Geyser (6 miles out of Green River) – travertine “buttons” that have precipitated out of the overflow geyser, which goes off every 2 or 3 days (not predictable). It is a coldwater geyser that goes off 2-3 feet in the air; used to go 20 feet plus. May go 4-5 miles further to look for barite pseudomorphs as there is the Morrison formation that way. I only scouted it once as was told it was there and I found a few as it was late and a fellow that lives a mile from the geyser told me about it, but I was limited on time.

Instructions

All trips meet at 7:45 AM. Please be ready to leave at 8:00 AM, as we have to drive to get to locations. I will be staying in Green River motel May 22-26, so if dry camping you won't have to stay in Green River on May 22, 23, or 25. There's a state campground in middle of Green River which you can pay and stay, but make reservations as I'm told it's busy.

May 21: Meet at Super 8 motel parking lot in Grand Junction (Exit Horizon Dr. off I-70, on south side of I-70). A gas station and Green Pastures restaurant are across from Super 8 motel.

May 22 and 23: Meet at Exit 193 about 70-75 miles West of Grand Junction off I-70. Large parking space and then it turns into a dirt road. Yellow Cat-Cisco exit. We will be on south side of I-70 for prep meeting. There is a gas station at Thompson Springs, Exit 187, so make sure to fill up with gas before you head out to Yellow Cat.

May 24 and 25: Meet at Green River West exit at the Loves Convenience Store on the south side of Main Street. From there we will go to San Rafael Swell area. You can dry camp in the San Rafael Swell area that night as we will come back to the same place on the second day. I will be in Green River both days and meet at the gas station West exit as the day before.

May 26: Meet near the Green River East exit at the Conoco gas station/Burger King. We will travel to Crystal Geyser (6 miles out of Green River).

These trips are flexible, because there's lots to find and if you want to stay in one area, just let me know. Let me know if you want to drop out any part of the trip as I want to be sure everyone is safe and accounted for. You can sign up for just one day trip or multiple day trips.

Sign Up Instructions

Call Marge Regel 719-650-8148 or email marjory.regel@yahoo.com until April 30th to sign up for any or all the trips. NO SIGN UP AFTER MAY 1st. I don't check my computer every day so phone would be best and leave a message if I don't answer. My vehicle is a Silver Toyota RAV4.

Here is the information I need when you sign up:

Name:

Phone:

Email:

Vehicle Make and Model:

License:

In May, I will send out the contact information for those that have signed up for the trip so you can set up your own carpools, if needed.

Weather

We will not go to these areas if it rains as it's not drivable. There are other places to visit if it rains, so don't be discouraged. Also dress for any kind of weather as hot, cold, etc. changes with little warning. Bring bug juice, water, food, sunscreen, hat, and your favorite book.

Cell Service

Remember not all areas have cell service, so if you need to cancel, do it early. I can check phone messages in the evening back at the motel, if needed.

There's Gold in them thar Leaves

Oscar L. Price

I've broken many rocks open prospecting but I've never found the mother lode or a gold nugget in my gold pan, just a few small flakes here and there, not enough gold to fill the bottom of a thimble, just enough tiny flakes to give me gold fever.

All you need for gold panning is a gold pan, an eye dropper to suck up the little flakes of gold, called flour gold, and a tiny bottle filled with water to make the tiny flakes look bigger, to show your friends.

The most I ever got out of gold panning was shriveled up hands, tired legs and an aching back, but it was always nice to be out by a river bank gold panning or just enjoying the outdoors. It's always exciting to be on a field trip prospecting for gemstones, crystals or fossil hunting, doing things that take my mind off work, bad news and people driving crazy.

Not much has changed in prospecting for gold since the Colorado gold rush except the price of gold and the demand. At today's gold price, a lot of people are out there prospecting in hopes of getting rich. Most prospectors would make more money selling rock hammers than they would prospecting for gold. Most all the easy gold has already been found.

You don't have to be a metallurgist to tell the difference between iron pyrite (fool's gold) and real gold, although iron pyrite sometimes can be found with gold. But it helps to know some of the other minerals found in gold ore and placer deposits. Calaverite, magnetite, calcite, platinum, garnets, and sulfides in auriferous quartz may contain gold, as do many other minerals not mentioned. Gold ore mined in Western Australia has 41.76% gold, 0.80% silver, and tellurium 56.65%. This is similar to gold ore found in some mines in California and Colorado.

Perhaps researchers in Australia have discovered a new way to prospect for gold without using a rock hammer or core drilling.

Scientists doing research in the Kalgoorlie region of Western Australia were studying why some eucalyptus trees continually dropped their leaves and some did not. They discovered that the bark, twigs and leaves of some of the *lesouefii* eucalyptus trees, commonly called "goldfield

black butt," contained an unusually higher amount of microscopic gold in their leaves than others in the same grove. Gold concentrations in the trees varied from 4 to 80 p.p.b (parts per billion). The researchers found gold deposits deep in the ground beneath the trees near their long tap roots. The highest concentration of gold was found in leaves from trees growing over gold deposits.

The researchers discovered that gold was toxic to eucalyptus trees and caused them to shed their leaves to rid themselves of heavy metals. Like other such elements in the earth, the microscopic gold gets sucked up by the plant as it absorbs nutrients, and gets transported throughout the tree. Roots of some eucalyptus trees have been found as much as 130 feet (40 meters) deep under the ground as the thirsty trees search for water.

The researchers in Australia tested the leaves in labs using x-rays and chemicals to determine which trees had gold deposits under them. Nuggets, which are only one-fifth the diameter of human hair, can point to a rich vein of gold underneath, only discovered by using the Australian Synchrotron, one of the world's most powerful x-ray eyes. Prospecting using X-rays would be much faster and cheaper than core drilling.

But don't even think about mining trees for gold. It would take five hundred trees to make one gold ring.

Someday, if not already, engineers and chemists will invent a way to test for minerals in leaves without taking them back to the lab. A small, battery operated analysis kit, and GPS to pinpoint the exact location of the gold bearing tree, might be possible. Testing leaves on eucalyptus trees might be an easy way to prospect for gold in California and Arizona and other places where eucalyptus trees grow. Maybe they will discover "There's Gold In Them Thar Leaves."

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Pick & Pack
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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.rmfmms.org