



Colorado Springs Mineralogical Society

Founded 1936
~ Lazard Cahn ~
Honorary President
"Pick & Pack"
Volume 63 No. 10
Dec 2023

Lumixdesigner at Pixabay

CSMS General Assembly



Thursday, Dec 21, 2023 7:00 PM
Mt. Carmel Veterans Center

A Rockhound's Christmas Party

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

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Annual CSMS Christmas Party

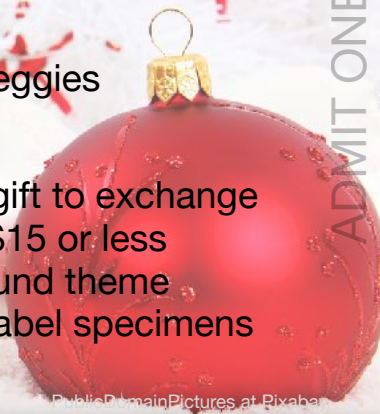
Thursday, December 21, 2023 7:00 PM
Mt. Carmel Veterans Center

Pot Luck: A-G Deserts
H-L Starches
M-R Fruits & Veggies
S-Z Salads

White Elephant: Bring a gift to exchange
- Valued \$15 or less
- Rockhound theme
- Please label specimens



MIM326 at Pixabay



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COLORADO SPRINGS MINERALOGICAL SOCIETY PO BOX 2 COLORADO SPRINGS, COLORADO 80901-0002
Visit our website: <http://www.csms1936.com/>

CSMS Group Calendar

Dec '23 Jan '24

13 Dec	10 Jan	Fossil Group	2nd Wed	6:00 PM	East Library Annex	Kristine Harris Richard Villareal	719-593-1524 831-760-6985
7 Dec	4 Jan	Board Meeting	1st Thur	6:00 PM	Zoom	John Massie	719-338-4276
5 Dec	2 Jan	Pebble Pups	1st Tue	4:15 PM	East Library	David St. John	719-424-9852
21 Dec	18 Jan	General Assy	3rd Thur	7:00 PM	Mt. Carmel Center	John Massie	719-338-4276
28 Dec	25 Dec	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)

Dec 2: WIPS (Western Interior Paleontological Society) Holiday Party and Silent Auction Fundraiser, at the Clements Community Center, Lakewood. All are welcome. See the WIPS website for details!

Dec 8-10: "Rocks and Rails" Gem and Mineral Show sponsored by the Flatirons Gem and Mineral Club, Boulder County Fairgrounds, 9595 Nelson Road, Longmont; combined with the Boulder County Model Railroad Club model train show; one admission for both, adults \$8, seniors \$5, children under 12 free with adult. Fri & Sat 10 AM – 5 PM, Sun 10 AM – 4 PM.

Dec 14: 6:00 PM, Colorado Scientific Society, December Annual Meeting, Potluck Dinner and Presidential Address, Cal Ruleman, US Geological Survey (presentation title TBA); in-person meeting at Calvary Church Golden; see <https://coloscisoc.org/> for details. All are welcome.

Feb 8-11: Tucson Gem and Mineral Show, at the Tucson Convention Center. These are the dates of the original, "main" show, sponsored by the Tucson Gem and Mineral Society; many other shows also take place in Tucson at multiple locations during the previous several weeks.

Feb 23-25: Denver Gem and Mineral Guild, Gem and Mineral Show, 10-5 Fri & Sat, 10-4 Sun, Jefferson County Fairgrounds, Exhibit Hall, 15200 W. 6th Ave, Golden. No admission charge. Dealers, club demonstrations, special exhibits, fluorescent display, door prizes, and more.

Mar 22-24: Fort Collins Gem and Mineral Show, 4-8 PM Fri, 9-6 Sat, 10-4 Sun, at The Ranch/Larimer County Fairgrounds, Thomas M. McKee 4-H Building; the Fort Collins Rockhounds Club 61st annual show.

May 4: 12:00-3:00 p.m., Colorado Mineral Society Silent Auction, held at Wheat Ridge United Methodist Church, Exhibition Hall, 7530 W. 38th Ave. (just east of Wadsworth). All are welcome to attend, and to bring specimens to sell in the auction (minimum donation of 20% of selling price to the club). Setup begins at 11 a.m.; there will be a vocal auction as well as silent auction tables.

May 18: 12:00-3:00 PM, Colorado Chapter, Friends of Mineralogy Silent Auction, held at Wheat Ridge United Methodist Church, Exhibition Hall, 7530 W. 38th Ave. (just east of Wadsworth). All are welcome to attend, and to bring specimens to sell in the auction (minimum donation of 20% of selling price to the club). Setup begins at 11 AM; there will be a vocal auction as well as silent auction tables.

June 7-9: Pikes Peak Gem and Mineral Show, at the Norris Penrose Event Center, 1045 Lower Gold Camp Road, Colorado Springs, sponsored by the Colorado Springs Mineralogical Society. Fri. 12-7 PM, Sat 10-5, Sun. 10-4.

Aug 8-11: Buena Vista Contin-Tail Gem, Mineral, and Fossil Show, Buena Vista Rodeo Grounds; free admission and parking.

Sept 12-15: Denver Gem and Mineral Show, part of the Hardrock Summit Show, Westin Westminster Hotel, Westminster CO. The several other gem, mineral, and jewelry shows take place in Denver during the preceding week.



Federation News Post

American Federation of Mineralogical Societies
Rocky Mountain Federation of Mineralogical Societies



Visit the new AFMS Juniors Website! <https://www.juniors.amfed.org/>

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DECEMBER 1ST, 2ND, 3RD, 2023
FRI & SAT: 10AM - 6PM, SUN: 10AM - 5PM

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ARKANSAS
QUARTZ CRYSTALS
PICTURE BY
LIZ KOSTURAKIS

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March 2, 2024 9am-5pm

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and the Coolidge Chamber of Commerce

adman@pinalgeologymuseum.org

DMRMC
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2024**

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**THE VENTURA GEM AND MINERAL SOCIETY
PROUDLY PRESENTS**

**MAY 24-26
2024**

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AT VENTURA
GEM, MINERAL & FOSSIL SHOW

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hosted by the Ventura Gem & Mineral Society

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at Ventura**

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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.



Juniors Newsletter Submission Form

American Federation of Mineralogical Societies

Thank you for submitting an article, pictures, poetry, artwork, or other contribution for publication in the juniors newsletter. Your article or other contribution can be on any rockhounding subject that interests you. Juniors need to be 17 years or younger. The top part of this form is for the junior to fill out and the bottom part needs to be completed and signed by a parent.

FOR THE JUNIOR TO COMPLETE

Name: _____ Age: _____

Title of the article or other contribution: _____

Rock club name: _____

School (optional – your school will receive a copy of your published work)

Signature of junior: _____

FOR THE PARENT TO COMPLETE

I grant permission for the American Federation of Mineralogical Societies to publish this article or other contribution, along with your child's name, age, and rock club, both electronically and in print. Your child retains the right to publish elsewhere, anytime, and anyplace in the future.

Please note that any photo(s) with identifiable children's faces will need each child's parent's permission to publish.

Parent's name (printed): _____

Parent's signature: _____

Parent's email address: _____

Street address: _____

City or town: _____ State: _____ Zip: _____

Please scan or photograph this completed form and send it to youth@amfed.org along with your article or other contribution for the juniors newsletter.

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.

Visit the new AFMS Juniors Website! <https://www.juniors.amfed.org/>

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



Presidential Matters



A message from CSMS President John Massie:

I want to remind everyone about the Christmas dinner on December 21 at Mount Carmel at 7 PM. This will replace our regular meeting. Check the front page for what side dishes to bring.

Remember that starting in January our meetings will move from Mount Carmel to the Colorado Springs Christian School located at 4855 Mallow Road. The first meeting there will be on January 18, 2024.

I am sure every one realizes that I am stepping down from my president position next year. I want to thank all the members for the support I have received from the membership. I want to thank my board of directors for their dedication. They are Shane Riddle, Vice President, Ann Proctor, Treasurer, Adelaide Bahr, Membership Secretary, John McGrapt, Secretary, John Emery, Pick and Pack Editor, Chris Burris, Member at Large, William Meyers, Member at Large, and Sharon Holte Past President. I would also like to thank Rick Jackson who served two years as Vice President. I certainly appreciate all of their help.

Thank you to Kevin Witte and Bob Germano for doing an excellent job with the Crystal Group. Kristine Harris and Barbara Middlemist for their work with the Fossil Group. Thanks to Frank Rosenberg for taking care of the claims and special projects that I needed help with. Kyle Atkinson for the great job he did with the field trips. Tina Cox for becoming Social Coordinator. Mike Nelson for being our RMFMS representative. Lisa Cooper for the fantastic work she has done with the Pikes Peak Gem, Mineral, and Jewelry Show. David St John for his work with the Pebble Pups/Earth Science Scholars, plus the extra time he spends on special events throughout the year.

I have enjoyed my time as president because of the support I have received from the members. Please give Alex Fields the same support you have given me.

Thank you,

John Massie
CSMS President

Grandpa's Rockhound Delight

David ST. John

It started the moment he could walk.
My grandson handed me three rocks.
One was Pike's Peak granite,
next was a chunk of quartz,
and the last one was leaverite.
All three of the gifts were precious at first sight.
My rockhound heart grew three times that day.
His mom said, "He has found the way."



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
Tina Cox, 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

CSMS General Assembly Minutes

7 PM, Thursday 16 Nov, Mt Carmel Vet Center, Co Springs

Address: 530 Communications Circle, Colorado Springs CO 80905

Board Attendance: President: John Massie, Vice President: Shane Riddle, Secretary: John McGrath, Member-at-large: Chris Burris, Editor: John Emery, Membership Secretary: Adelaide Bahr.

Agenda:

- I. Meeting was called to order by President John Massie at 7:00 PM.
- II. The Pledge of Allegiance was led by President John Massie.
- III. John Massie introduced the slate of candidates for the CSMS 2024 Board. The slate was accepted by hand vote.
- IV. Introduction of New Members: Cindy and Douglas Stodola, Christina Barbas - guests
- V. Program Speaker - Dan Mira, a CSMS member spoke on the minerals of his home country, Romania
 - A. Carpathian mntns cross the country; rose from collision of tectonic plates.
 - B. There are high quality gold, silver and quality coal deposits.
 - C. Mining in the Maramures began in the 14th Century (1329). The primary minerals were Gold, Silver, Zinc, and Lead.
 - D. He presented photos of beautiful specimens of Stibnite, Calcite, Barite, Rhodosite, Gold & Quartz
- VI. Meeting
 - A. 28 members/guests in attendance and 5 minerals were given out
- VII. Officer Reports
 - A. President - John Massie
 1. The October general meeting minutes were accepted by voice vote.
 2. Presented flyer for internet rock auction; open to members.
 - B. Vice President, Shane Riddle - present, no report
 - C. Treasurer, Ann Proctor - absent

D. Secretary, John McGrath - present

1. Requested info from members who have club property for an ongoing effort to develop an inventory.
2. Explained discussions to establish a formal memorandum of understanding with the WMMI.

E. Membership Secretary, Adelaide Bahr - present, no report.

F. Editor, John Emery - present, no report

G. Members at Large

1. Bill Myers - absent
2. Chris Burris - present, no report.

H. Past President - Sharon Holte, absent.

I. Website and Show Coordinator - Lisa Cooper, Absent.

VIII. Satellite Groups

- A. Crystal Group - Kevin Witte, present. He reported that the next meeting would occur on the fourth Thursday in January at CSCS. The Christmas Party for the Crystal Group would take place at the Rosenberg's on 28 December.
- B. Faceting Group - John Massie reiterated that you only need to contact him to bring the machine to your house.
- C. Pebble Group - David St John. The last meeting presentation was "Geology of Native Americans." The Club will continue to meet at the East Library at 4:15 PM.
- D. Fossil Group - Kristine Harris and Richard Villareal stated that meetings are held the 2nd Wednesday of the month from 6-7:30 at the East Library Annex.
- E. Jewelry Group - Still in need of a Chairperson. John Massie mentioned that there is no equipment for this group.
- F. Lapidary Group - Sharon Holte, absent. Please call her on Sunday night after 6:30 pm to schedule an appointment.

IX. Liaisons

- A. Claims - Frank Rosenberg. No report.
- B. Field Trip Coordinator - Kyle Atkinson, Present. No report.
- C. Social Coordinator - Tina Cox, Present. No report.
- D. Storekeeper - Ann Proctor. Absent.

X. Unfinished Business - None discussed.

XI. Old Business

- A. Christmas Dinner will be on the 21st of December. We have 2 Turkeys and 1 Ham being cooked. White Elephant Gift exchange will take place with a \$10-15 limit on gifts. The gifts should be Mineral related although alcohol will not be refused.

XII. New Business

- A. WMMI MOU - see above

XII. Meeting adjourned by President John Massie at 8:30 PM

RESPECTFULLY SUBMITTED by **John M McGrath MD COL (RET) USA**

Wavellite & Fluellite on the Road to Winnemucca

Mike Nelson
csrockguy@yahoo.com

*I was totin' my pack
along the dusty Winnemucca road
When along came a semi
with a high and canvas covered load
"If you're going to Winnemucca,
Mack with me, you can ride"
So I climbed into the cab,
and then I settled down inside
He asked me if I'd seen a road
with so much dust and sand
And I said, "Listen, Bud,
I've traveled every road in this here land"
I've been everywhere, man.*

— Hank Snow version



Google Earth© image of Basin and Range Province around Lovelock, Nevada, and the West Humboldt Range, home of the Willard Mine. The Basin and Range is defined by narrow faulted mountain ranges with adjacent rather flat basins—a horst and graben topography, or as Clarence Dutton said, “an army of caterpillars crawling northward.” The topography is due to extensional tectonics (pull-apart) of the later Tertiary (Miocene, ~17 Ma and probably continuing).

The name Willard conjures up a vivid picture of Ben and his rat friends devouring their former human friend Willard! I am not a big fan of Sci Fi or horror films, but Willard is not

one to watch before hitting the rack. But 1971 was many decades ago and now the name is much more exciting — a mining district, and mine, located in a desolate part of Pershing County, Nevada, in the north end of the West Humboldt Range not too far from the County Seat of Lovelock. In fact, Lovelock is the only town in this large county whereas Winnemucca is the County Seat and only town in nearby Humboldt County; they are connected by I-80. What is the landscape like? Ask Center Divide, a group who recorded the album *From Lovelock to Winnemucca*:

*If you make that drive
And you like tunes
you better have a tape deck
Airwaves are empty
Ain't a lot on the radio
Better yet you can sit and ride
And listen to the dry wind
Flappin' through the window
Breathe in the scent of sage
Breathe it in real slow
And you breathe deeper
I swear you will*

That description of driving across Nevada is one for the ages. Try the drive with a couple of youngsters sometime — been there, done that.

*If you ever drive
From Lovelock to Winnemucca
I suggest you stop at every Dairy Queen
Towns are few and they're far between
And you'll have to fill up anyway
And there's something 'bout a frosty
Makes the pain go away*

Somewhere near Lovelock is the Willard Mine, or the Willard Mines, all clustered together in the Willard Mining District. The area has a long history of exploration dating back to the early 1900s with most tunnels and shafts producing minor amounts of

silver, gold, and antimony until mid-century. Drilling exploration found mineable gold in the 1980s and production lasted for about two to three years from 1990-1993. The initial gold was from near surface free-milling gold and later recouped by heap leaching. The mineralization was in the Late Triassic to Early Jurassic Auld Lang Syne Group (slightly metamorphosed siltstones and limestones). Fractures and brecciation zones in these sedimentary rocks allowed for gold- and silver-bearing hydrothermal solutions, associated with Tertiary intrusive rocks, to spread throughout. I could not locate production figures; however, exploratory drilling continued into the early 21st century but today mandatory remediation has covered much of the area.

So, other than *there's a whole lotta room to lose a broken heart* (Center Divide) what else is neat about the area? Well, for starters a 1905 paleontological expedition led by John C. Merriam of UC Berkeley found a substantial number of Ichthyosaurs (Mesozoic marine reptiles), *Cymbospondylus petrinus*, and transported most back to the UC Museum. Twenty-five years later even larger and better-preserved Ichthyosaurs, *Shonisaurus popularus*, were located in nearby Nye County that then became Berlin-Ichthyosaur State Park. More importantly for this article, there are 41 mineral species known from the Willard (MinDat) and the mine “is the site of the world's largest crystals of fluellite and perhaps also minyulite; and it has furnished what are by far the finest quality specimens of wavellite, fluellite and minyulite ever discovered in the state [Nevada]... along with other minerals including... crandallite, dufrenite, gypsum, jarosite, native selenium and strengite/variscite” (Jensen and others, 2001). It is a treasure trove of spectacular supergene

phosphate minerals in a sediment-hosted, epithermal, Carlin-type gold deposit. Over the years I picked up Willard specimens of fluellite and wavellite (it was not green like Arkansas).



Above: Transparent fluellite crystals on top of quartz crystals. Most crystals shown here are submillimeter.
Photos: M. Nelson



Above: Transparent fluellite crystals on top of quartz crystals. The largest crystal is ~1 mm in width.

Photo: M. Nelson

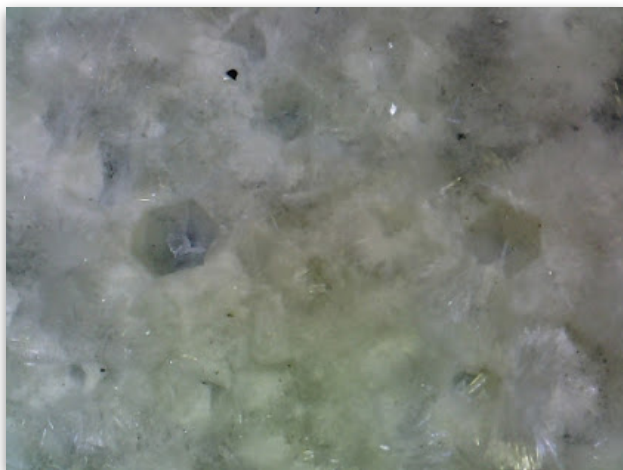
Fluellite crystals at Willard (at least in my specimen) are colorless, transparent, sharp, mirror-lustrous, euhedral, orthorhombic crystals. A few other localities may produce lavender or yellow crystals. Fluellite is a rather rare fluoro-hydroxyl, secondary, phosphate $[\text{Al}_2(\text{PO}_4)\text{F}_2(\text{OH}) \cdot 7\text{H}_2\text{O}]$ that is usually associated with pegmatites and phosphorite deposits. At Willard, fluellite is found in a supergene phosphate zone and is paragenetically [order of crystallization] late and often occurs directly upon lustrous quartz crystals. "These are very likely the best and largest examples of the species found in the world" (Jensen and others, 2001).

Although I usually associate wavellite as a green mass (colored by vanadium) of radial crystals found in Arkansas, the wavellite



Above: Photomicrographs above show numerous radiating clusters of clear to white, fibrous crystals of wavellite. Most are 1-2 mm in size although some are submillimeter.

Photos: M. Nelson



Above: Hexagonal molds in wavellite left by quartz crystals (epimorph?) Photo: M. Nelson

specimens in these phosphate rocks of Nevada are completely different. The Willard wavellites are radiating clusters of clear to white (no vanadium) fibrous crystals in a delicate “jackstraw” type of arrangement. Almost hidden away among the fibers are scattered, quite tiny, pale gray to white wavellite spheres. Wavellite $[\text{Al}_3(\text{PO}_4)_2(\text{OH},\text{F})_3 \cdot 5\text{H}_2\text{O}]$ is also found in the phosphate supergene. “Paragenetically, wavellite occurs either on quartz or the phosphates crandallite, and/or variscite” and are easily ranked as the finest examples of wavellite ever found in Nevada” (Jensen and others, 2001).

But really confusing to me is that recently (Kampf and others, 2017) described fluorwavellite $[\text{Al}_3(\text{PO}_4)_2(\text{OH})_2\text{F} \cdot 5\text{H}_2\text{O}]$ as the F analogue of wavellite. It is visually indistinguishable from wavellite since it is essentially identical to wavellite in appearance and physical properties. It has the same structure as wavellite, differing only in having one of the two independent hydroxyl sites replaced by F. Therefore, MinDat at about the same time, noted that the Willard wavellite is actually fluorwavellite distinguishable only with the use of electronic gizmos. Way above my pay grade!

REFERENCES CITED

Jensen, M., J. Leising, 2001, Wavellite, fluellite and minyulite from the Willard Mine, Pershing County, Nevada: Mineralogical Record vol.32, no.4.

Kampf, A.R., P.M. Adams, H. Barwood, B.P. Nash, 2017, Fluorwavellite, $\text{Al}_3(\text{PO}_4)_2(\text{OH})_2\text{F} \cdot 5\text{H}_2\text{O}$, the fluorine analogue of wavellite: American Mineralogist 102.

ALSO see:

Conelea, R. and W.C. Howard, 2010, The geology and gold-silver mineralization of the Wilco Project—Willard Mining District, Pershing County, Nevada in Great Basin Evolution and Metallogeny: 2010 Symposium Proceedings of the Geological Society of Nevada.

AND REMEMBER:

*If you ever drive
From Lovelock to Winnemucca,
It's a good idea to pack your cares along
The desert's big and wide
Those mountains stand far apart.*

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.rmfmts.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

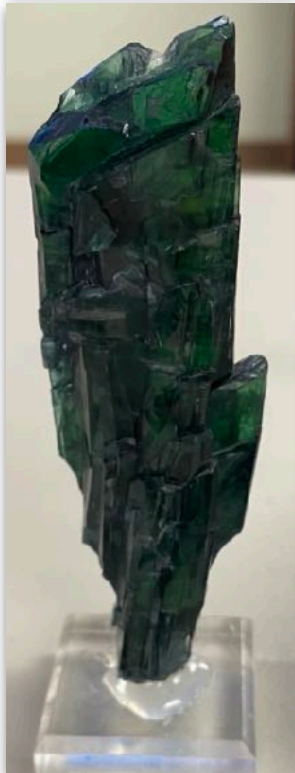
General Assembly
Nov 16, 2023

Hearty rockhounds gathered on a cool November night in Colorado Springs to listen to CSMS member Dan Mira talk to us about the minerals of Romania. Thanks Dan!

We elected the following officers to serve for 2024: Alex Field as President; Shane Riddle as Vice president; Ann Proctor as Treasurer; John McGrath as Secretary; and Bill Myers and Chris Burris as Members-at-large.

Members brought in specimens to share, including some thunder-eggs by Shane Riddle (shown right and below).

Business was conducted as usual and 5 free gems and minerals were given away.





Open Letter to the Members of CSMS

I attended my first CSMS meeting in January as an initial step towards achieving a goal I had set for myself for 2023 – to become a CSMS member and, thereby, begin learning more about a subject that has fascinated me since I was a child. I hoped to not only learn more about rocks/gems/minerals in general, but also to explore the hobbies of lapidary, faceting and jewelry making.

Now, less than 365 days later, I want to express my sincere thanks and deep appreciation to the members of CSMS. The knowledge, abilities and experiences I have gained as a result of my affiliation with this club and its members have far exceeded any expectations that I brought with me to that first meeting in January! At every step of this journey I have encountered members who have freely and enthusiastically shared their knowledge, experience and skillsets with me – whether it be at monthly meetings, on field trips or in private lessons. I have learned so much, and I have gained an appreciation for how much more there is to learn.

I am beyond thrilled that this Christmas, I will be gifting numerous people with beautiful pendants, earrings or tree ornaments that I made myself (from stones I found or mined, nonetheless). That's such a satisfying feeling which was only made possible by the willingness of CSMS members to embrace and "raise up" a new member. Your kindness could not be more appreciated.

As I sat happily in a dirt pit digging for amethyst on a field trip this summer, I found myself thinking "I have found my people!" I look forward to continuing on this adventure with you, and I'm excited to see what 2024 will bring.

Sincerely,
Tina Cox



Artwork: Marion Cada at Pixabay and Geetanjali Lachke at Pixabay | Note: the garlands were generated by AI according to Pixabay

Rendezvous

Florissant Fossil Beds National Monument, Colorado

By Steven Wade Veatch

Returning to the massive stone stump,
among the quaking aspens and green pines
where pasque flowers floored the forest,
I counted tree rings of stone—survivors.

As the birds sang and squirrels chattered,
the moment bloomed into an alchemy of time—a rendezvous
of the primal past with the afternoon’s warm present.
In a blaze of thought I wondered
what mark will I leave behind?



The “Big Stump” at the Florissant Fossil Beds National Monument. *Photo: S. W. Veatch.*



Fossilfun14@gmail.com

Geology of Native Americans Lesson

On November 7th Pebble Pups and Earth Scholars met at the East Library. The topic was Native American connection to geology. We learned about the rock, minerals, and fossils used for tools, weapons, and ceremonies. We had a hands-on approach as we explored grinding cornmeal in the lava rock grinder. We made spirit stones as our craft as well as coloring pages. The free samples this month were arrow heads carved in Mexico and Apache Tears (obsidian ball) from New Mexico as big as golf balls.



Pebble Pup Winter Party

Our December 5th meeting 4:15 PM - 5:15 PM will be our Winter party, no formal lesson but please bring in "share and tell" items. Please bring any minerals, rocks, or fossils that we can help identify and share how you found or purchased it. I will have games to play and dinosaur cookies to munch. The free sample will be a mineral that I save for special occasions. Bring in your pictures, poems, or short stories so I can submit to AFMS and RMFMS for club submissions. We had two first place winners last year. December has many local events: Garden of the Gods Visitors Center Classes, STEM class at WMMI, and Dinosaur resource center Woodland Park. We can do "pick a rock, leave a rock" as gifts to each other (optional).

The January meeting hopefully will be on the 9th, second Tuesday due to the holiday weekend at the East Library 4:15 PM - 5:15 PM. Look for an email from the editor pending confirmation.



Thank you, club members, for all the donations throughout the rockin' year.

Visit the CSMS Pebble Pup website: <http://pebblepups.blogspot.com/>





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:

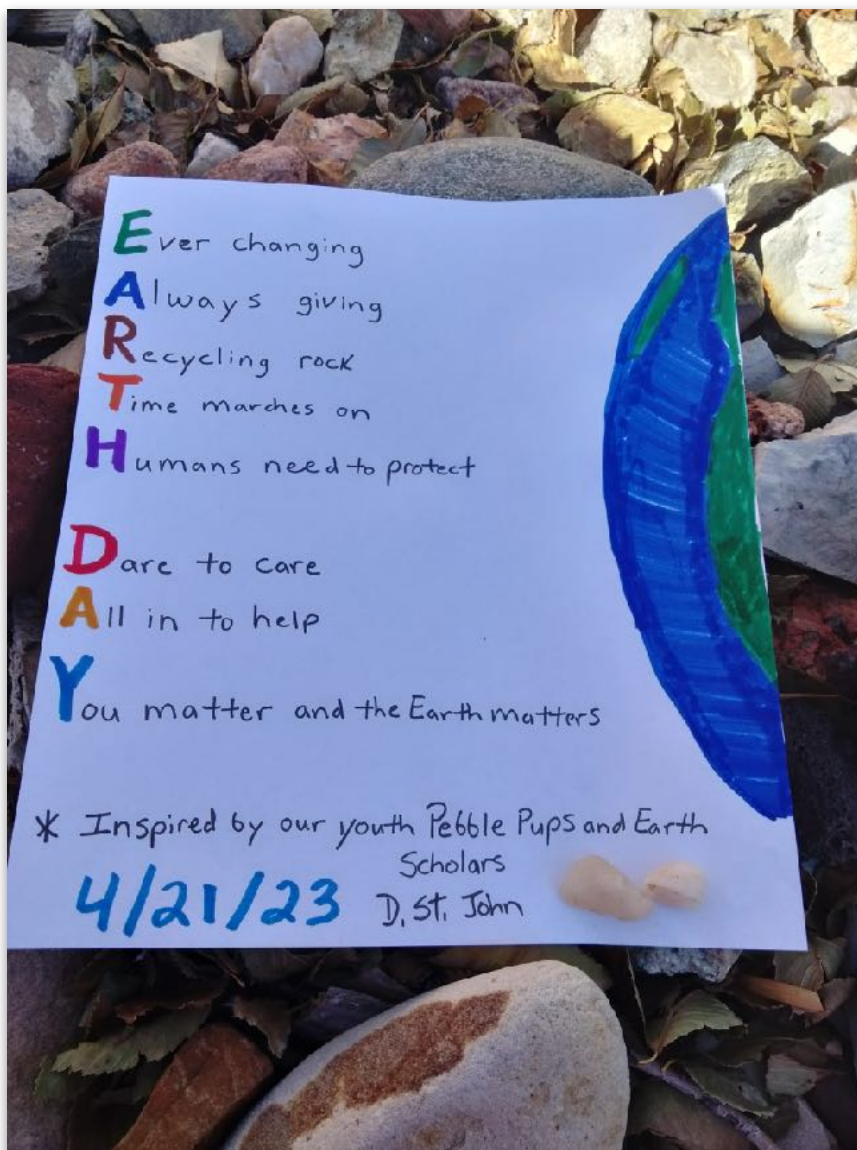
For hardcopy photos or articles, mail to the address below or bring them to the General Meeting. All hardcopy photos remain the property of the submitter and will be returned. Electronic photos can be submitted at resolutions above 200 dpi in any format.

Feature articles can be in MS Word or Mac Pages, preferably not pdf. The newsletter is produced in Mac Pages.

e-mail the editor:
pickandpackeditor@gmail.com

Mail to: Pick & Pack Editor PO Box
2 Colorado Springs, CO 80901

The PICK & PACK is published ten 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.





Colorado Springs Mineralogical Society

Post Office Box 2, Colorado Springs, CO 80901

www.csms1936.com

2024 APPLICATION FOR MEMBERSHIP

LAST _____ FIRST _____ MIDDLE INITIAL _____

SPOUSE _____ Child (Name) _____ Age: _____ GRADE _____

Child (Name) _____ Age: _____ GRADE _____

#/ STREET _____ CITY _____

STATE _____ ZIP _____ EMAIL _____

CELL PHONE _____ HOME PHONE _____

Have you previously been a member of the CSMS? YES ____ NO ____ WHEN _____

May your name and contact information be published in the CSMS Membership Directory, distributed only to members? YES ____ NO ____

May your photo may be used in the CSMS Publication "The Pick & Pack"? YES ____ NO ____

	New/Continuing Members		New Members Only that signed up on/between:			
	Before Jan 31, 2023	After Jan 31, 2023	May 31, 2022 - Sep 30, 2022	Oct 1, 2022 - Jan 31, 2023		
Pebble Pup Membership (4 - 12 yrs old; parent is no a member)	\$10.00	\$15.00	\$7.50	\$10.00		
Junior Membership (12 - 17 yrs old; parent is no a member)	\$10.00	\$15.00	\$7.50	\$10.00		
Individual Membership (18 yrs old or older)	\$25.00	\$30.00	\$15.00	\$25.00		
Family Membership (2 adults and dependents under 18)	\$35.00	\$40.00	\$20.00	\$35.00		
Corporate Membership (Up to 5 individual memberships)	\$95.00	\$100.00	\$50.00	\$95.00		

SATELLITE GROUPS: Please check all you may be interested in joining - *fill out each year please*

PEBBLE PUPS	FACETING	LAPIDARY	Other: _____
JUNIORS	FOSSILS	PHOTOGRAPHY	
CRYSTAL	JEWELRY	OTHER	

VOLUNTEER OPPORTUNITIES: Volunteers are what make our club! - *fill out each year please*

GUEST SPEAKER	FIELD TRIPS	EDITOR/ WRITING	Other: _____
CLUB OFFICER	LOCAL ROCK SHOWS	LIBRARY	
HISTORIAN	ARTIST/MEDIA	REFRESHMENTS	

I hereby agree to abide by the Constitution and By-Laws of the Colorado Springs Mineralogical Society available at:
http://www.csms1936.com/wp-content/uploads/2017/02/Constitution_and_By_Laws.pdf. I have read the membership information, as well as the request and waiver for field trips on page II (following). I understand that all members must sign a separate waiver at each field trip to participate. I agree to abide by the American Federation of Mineralogical Societies (AFMS) Code of Ethics available at:
<http://www.amfed.org/ethics.htm>

Signature of Primary Applicant or Guardian if Minor _____

Application Date _____

Mail this form and your payment to: Colorado Springs Mineralogical Society, PO Box 2, Colorado Springs, CO 80901 - 0002

Membership Chair Rev: 3 Dec 21

Page 2: CSMS Application 2024
- Membership Information Page -
- Waiver Release to Participate in Field Trips -

Membership Information

- Membership to CSMS is annual, from January 1st to December 31st. Membership dues must accompany this application, which must be filled out each year.
- Members must abide by the CSMS Constitution and By-Laws, located on the web at:
http://www.csms1936.com/wp-content/uploads/2017/02/Constitution_and_By_Laws.pdf
- Members in good standing receive the following benefits: 10 electronic issues of the CSMS Pick & Pack newsletter; right to participate in all field trips (additional fees may be required on some field trips and members are responsible for all transportation to and from); participation in one or all Satellite Groups (some groups may request additional fees to help cover resource costs); free admission to the Western Museum of Mining and Industry; a year of learning and enjoyment, plus a lifetime of memories. The Pebble Pup program is a satellite program.
- Continuing memberships must pay full-year dues; a \$5 discount can be applied to renewals on or before January 31st. Anyone who has previously been a member must pay the full rate each year regardless of the time of the year they pay their dues.
- A person, family, or corporation joining the CSMS as a new member after May 30th shall pay half the yearly membership rate. A person joining CSMS as a new member after October 1st receives the rest of the current year plus the next year's membership. The partial year membership shall not apply toward the 25 year Lifetime Membership.
- Members who have paid their dues for 25 years will be awarded a Lifetime Membership on their 26th year. Lifetime Members receive all of the CSMS benefits and no longer have to pay the annual dues. Individual Memberships provided by Corporate Membership are excluded from Lifetime Status. Corporate membership grants up to 5 individual memberships and one yearly (10 issues) 3.5" x 2" advertisement in the CSMS Pick & Pack.

Release by Participants from Claims Arising By Virtue of Mineral Collecting

Led By Field Trip Leader of the Colorado Springs Mineralogical Society
A Non-Profit Corporation – Member: Rocky Mountain Federation of Mineralogical Societies

I/we, the undersigned, hereby request permission to participate in mineral collecting led by the Field Trip Leader of the Colorado Springs Mineralogical Society, a non-profit corporation.

I/we know the risks and danger involved in such activities and that unanticipated and unexpected dangers may arise during such activities, and I/we assume all risks of injury to my / our persons and properties that may be sustained in connection with the stated and associated activities in and around the premises.

In consideration of the permission granted to me/our participation in the stated activities, I/we hereby for myself, my heirs, administrators, and assigns release to the Colorado Springs Mineralogical Society and the Rocky Mountain Federation of Mineralogical Societies, and their representatives, servants, agents, officers and officials and all other participants in the stated activities of and from all claims, demands actions and causes of actions of any sort, for injuries sustained to my/our person and/or property during my presence on the premises and participation in the stated activities due to negligence or any other fault.

Signature of Primary Applicant or Guardian if Minor

Date



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.rmfmms.org