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. 3
April 2023

# CSMS General Assembly

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

## ~ Calvin Johnson ~

## Gold Prospectors of Colorado

**M - Z BRING SNACKS**

Club 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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## Calvin Johnson, "Gold Prospecting"

Calvin started panning in the mountains of SW Idaho ~1970 (screened star sapphires earlier, but at a known producing claim) then took a break for Air force service until ~1983. He returned to panning and started sluicing and dredging again in SW Idaho, SE Oregon and Nevada. After another break from 1989 to ~1993, Calvin started prospecting Colorado from a base in Colorado Springs, then another move and return to Colorado in 2004.

Some prospecting heritage: Calvin's maternal grandfather left his Montana homestead to 'strike it rich' in the gold fields of Idaho, Washington and Oregon, but didn't. He made a Klondike trip and survived with at least enough to come back to Idaho.

# CSMS Group Calendar

| Apr '23 | May '23 | | | | | | |
|---|---|---|---|---|---|---|---|
| 12 Apr | 10 May | Fossil Group | 2nd Wed | 6:00 PM | East Library Annex | Kristine Harris | 719-593-1524 |
| 6 Apr | 4 May | Board Meeting | 1st Thur | 6:00 PM | Zoom | John Massie | 719-338-4276 |
| 4 Apr | 2 May | Pebble Pups | 1st Tue | 4:15 PM | East Library | David St. John | 719-424-9852 |
| 20 Apr | 18 May | General Assy | 3rd Thur | 7:00 PM | Mt. Carmel Center | John Massie | 719-338-4276 |
| 27 Apr | 25 May | 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)

**Apr 7-9:** Colorado Mineral and Fossil Spring Show, Crowne Plaza DIA, 15500 E. 40th Ave. See https://www.coloradomineralandfossilshows.com. Free admission. 10-6 Fri. & Sat., 10-5 Sun.

**Apr 20:** 7:00 PM (social time, 6:30), Colorado Scientific Society Emmons Lecture and April Meeting, When the Colorado Ran North – Tracking Zircons from Arizona to the Labrador Sea, by Jim Sears, University of Montana. In-person + Zoom meeting; all are welcome to attend at Golden Calvary Church, 1320 Arapahoe St, Golden, CO (entrance off 14th St.).

**Apr 22-23:** Southern Colorado Gem and Mineral Show, Pathfinder Regional Park & Event Center, Florence, CO. "Earth Day weekend". This is a new gem and mineral show to Colorado, just now being organized. See https://socorockandmineralshow.com/ or www.facebook.com/socorockshow for more info (forthcoming).

**Apr 27:** 2:00-3:00 PM, Denver Museum of Nature & Science, Earth Science Colloquium, "Paleontology in the east: New discoveries from the Upper Triassic of Virginia," by Adam Pritchard, Virginia Museum of Natural History. In the VIP Room, in-person only, all are invited, museum admission not required; check in at the Security Post. Enter through the staff/volunteer entrance.

**May 6:** Colorado Mineral Society Silent Auction, at Wheat Ridge United Methodist Church, 7530 W. 38th Ave., 11:00 AM – 4:00 PM; see http://www.coloradomineralsociety.org/ for details. All are welcome to attend, bid, and bring specimens to sell.

**May 11:** 2:00-3:00 PM, Denver Museum of Nature & Science, Earth Science Colloquium, "Does size matter? What brachiopods tell us about evolutionary rules," by Judi Sclafini (UC Santa Cruz). In the VIP Room, in-person only, all are invited, museum admission not required; check in at the Security Post. Enter through the staff/volunteer entrance. https://sites.google.com/view/dmnsdes2020colloquiumschedule/home

**May 11:** 7:30 PM, Friends of Mineralogy May meeting, in person in Berthoud Hall 109 + by Zoom, topic TBA. See https://friendsofmineralogycolorado.org/ for an update.

**May 18:** 7:00 PM (social time, 6:30), Colorado Scientific Society May meeting, North American Stress and Strain, by Jens Lund Snee, US Geological Survey; and, Pacific Northwest Neotectonics, by Katherine Alexander, US Geological Survey. In-person + Zoom meeting.

**May 19:** 2:00-3:00 PM, Denver Museum of Nature & Science, Earth Science Colloquium, "Geology of Grand Mesa, Colorado," by Rex Cole (Colorado Mesa U). In the VIP Room, in-person only, all are invited, museum admission not required; check in at the Security Post. Enter through the staff/volunteer entrance.

**May 20:** 12 noon – 4 PM, Friends of Mineralogy Silent Auction, Wheat Ridge United Methodist Church, 7530 W. 38th Ave. All are welcome to attend, bid, and/or bring specimens to sell (minimum 20% donation to FM). See https://friendsofmineralogycolorado.org/

**June 5:** 2:00-3:00 PM, Denver Museum of Nature & Science, Earth Science Colloquium, "The Dead Sea: Past, present and future," by Ittai Gavrieli, Israeli Geological Survey. In the VIP Room; in-person only, all are invited, museum admission not required; check in at the Security Post.

# Community Events (Con't)

**June 9-11:** Pikes Peak Gem, Mineral and Jewelry Show, Norris Penrose Event Center, 1045 Lower Gold Camp Road, Colorado Springs. Fri. Noon-7:00 PM, Sat. 10-5, Sun. 10-4. Set up on the 8th. Admission $5 per day, $8 for multiple days, 12 and under free. Sponsored by the Colorado Springs Mineralogical Society. World's best gem show.

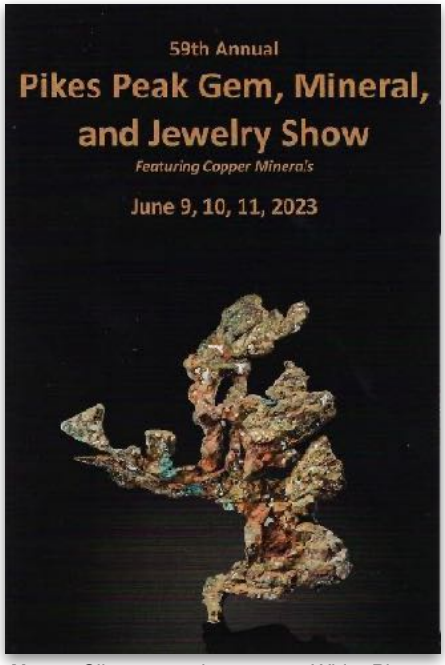
**Jun 19:** 2:00-3:00 PM, Denver Museum of Nature & Science, Earth Science Colloquium, "Linked Ecologies: Connecting invisible pasts and actionable futures," by Anshuman Swain (Harvard). In the VIP Room. Enter through the staff/volunteer entrance.

**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.

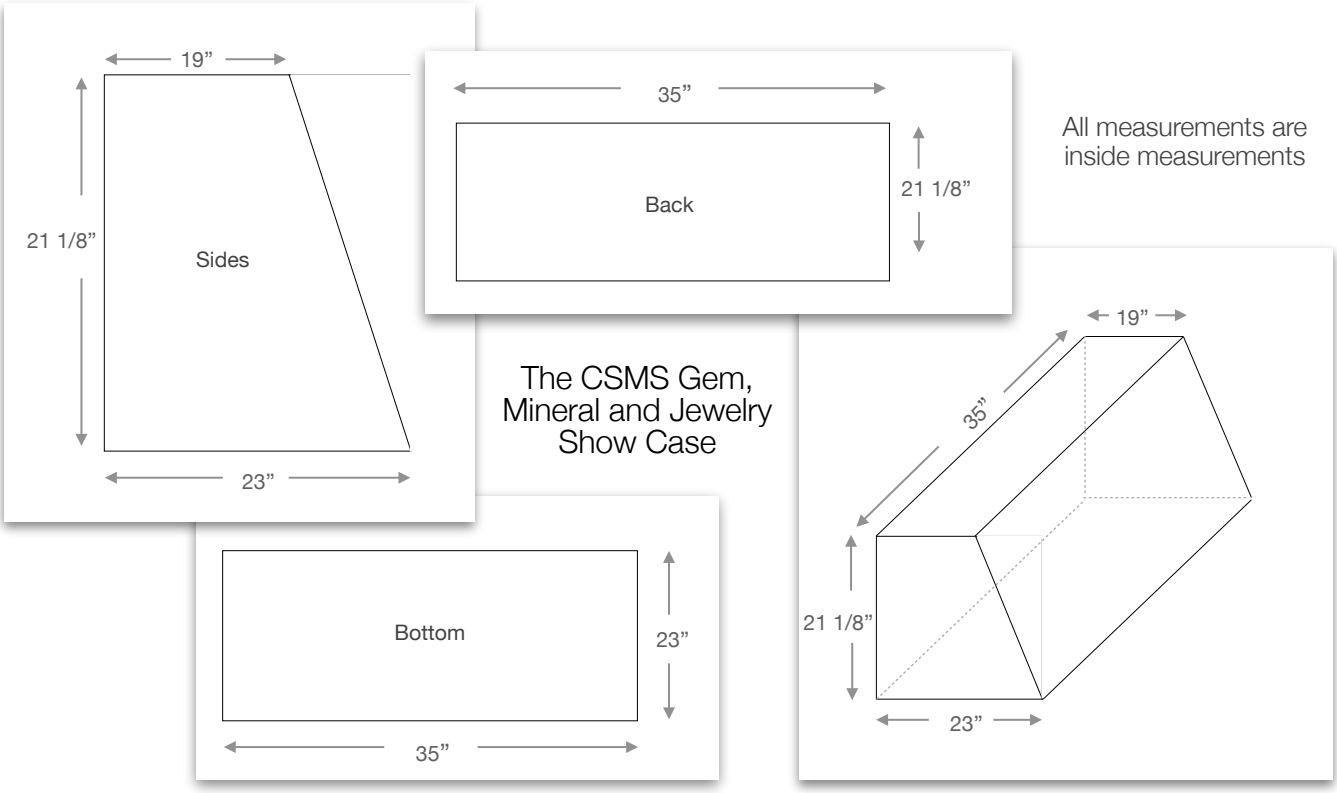
**Aug 24:** 2:00-3:00 PM, Denver Museum of Nature & Science, Earth Science Colloquium, "Mass extinctions and high resolution astrochronology in the Upper Devonian: Tales from New York and Colorado," by Jeff Over (SUNY Geneseo). In the VIP Room. Enter through the staff/volunteer entrance.

**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.




**Above:** Silver on native copper. White Pine Mine, Ontonagon County, Michigan. *Phil Persson, Persson Rare Minerals. Photo: Mark Cross.*



## 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:**

## Presidential Matters

**A message from CSMS President John Massie:**

I want to remind everyone that the Pikes Peak Gem, Mineral, and Jewelry Show is June 9, 10, and 11th. We will set up on June 8th. We need volunteers for set up, ticket takers, silent auction, and tear down. I will have sign up sheets at the general meetings. If you cannot attend the general meetings you can contact me to volunteer: Jsmassie1075@gmail.com

We have an exciting schedule of field trips this summer. I hope everyone can participate. Do not forget that we can always use field trip leaders. This is really an easy thing to do.

I hope members take advantage of the special interest groups we have. This lets you get together with people of similar interests. I also have some groups that we could use a volunteer or volunteers to lead, as you can see, in the margin, to the left.

John Massie
CSMS President

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## Norma Wing

June 21, 1925 – March 15, 2023

Norma Wing, age 97, of Colorado Springs, Colorado passed away on Wednesday, March 15, 2023

On June 21st 1925 the eastern plains of Colorado celebrated the first day of summer and the birth of Norma Ecker. Norma grew up near Matheson, CO. She was the third daughter of Gilbert and Tillie Ecker. She lived through the perils of life on a dry land farm which included the dust bowl days, and having to walk miles to and from school (uphill both ways). Norma was married to Robert Wing (also from Matheson). They moved to Colorado Springs where Norma attended beauty school and spent several decades "bending hair" in Norma's Beauty Shop. They had one son, Gerald, who developed an interest in rock collecting and ended up dragging his folks to meetings of the Colorado Springs Mineralogical Society where they got hooked on rock hounding. This hobby led to many new friendships and countless trips to search for gems and minerals, not just in Colorado, but all across the United States including Alaska and Hawaii.

IN THE CARE OF
Memorial Gardens Funeral, Cremation & Cemetery

# 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

**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
**Vacant,** Federation Rep

# CSMS General Assembly Minutes

## 7 PM, Thursday 16 Mar 23, 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, Member-at-Large: Bill Meyers, Editor: John Emery.
**Agenda:**

I. Meeting was called to order by our President John Massie at 7:03 PM
II. The Pledge of Allegiance was led by President John Massie
III. Introduction of Guests: Mary McDonald, Jan Wildsberger, Sarah Villa and Robert Baldwin
IV. Introduction of New Members: Raquel McDonald
V. Program Speaker. Dan Zellner gave a beautiful presentation on "The Evaporite Minerals of The Searles Lake Deposit" with excellent photos of the unique minerals found there.
VI. Meeting - There were 37 people present and 8 minerals were given out.
VII. Officer Reports
  A. President - John Massie reminded everyone of the upcoming Mineral and Gem show in June and asked for volunteers to sign up.
  B. Vice - President - Shane Riddle, VP, present with no report, but with a beautiful fluorite plate from out of state.
  C. Treasurer Ann Proctor- absent, No Report. She is recovering from an injury.
  D. Secretary John McGrath - Present. He is still looking for CSMS items held by members to update the Club's Inventory. He also brought in recently found specimens of smokey quartz and fluorite from the Fern Creek/Long Hollow area.
  E. Membership Secretary - Adelaide Bahr, Absent, No Report
  F. Editor - John Emery. Present, No Report
  G. Members at Large
    1. Bill Myers - Present, no report
    2. Chris Burris - Present, no report, but he displayed a beautiful amazonite twin recently excavated from a claim in Lake George.
  H. Past President - Sharon Holte, absent
  I. Website and Show Coordinator - Lisa Cooper, Present
    1. Distributed Mineral and Gem Flyers
    2. Stated that set up would occur on June 8 and tear down the night of the last day.
    3. On April 15th she would take names from the waiting list for booths. She asked that anyone wishing to be on the waiting list should call or send an email.
    4. She asked David St John if he wanted to set up a Pebble Pubs Scavenger Hunt for the Mineral Show.
    5. As to her work as the Website manager, she stated that if anyone wanted anything posted to send it to her.
VIII. Satellite Groups
  A. Crystal Group - meeting next week at 7pm at the Mt Carmel location.
  B. Faceting Group - John Massie, no report
  C. Pebble Group -David St John, present, and he brought in his mineral magnifying scope which has been enjoyed by the Pups. He stated that 3 kids attended the last meeting at the East Library.
  D. Fossil Group - Kristine Harris announced that meetings are held the 2nd Wednesday of the month from 6-7:30 at the East Library Annex. Stromatolites and Algae are the focus this month.
  E. Jewelry Group - Still in need of a Chair person.
  F. Lapidary Group - Sharon Holte reminded members that she was available for phone calls to schedule use of the club's rock saws on Sunday night after 6:30 pm. You can send her an email at any time.
IX. Liaisons
  A. Claims - Frank Rosenberg. Present. No Report
  B. Field Trip Coordinator - Kyle Atkinson, Present. April Fools Claim Field Trip tentatively set for 01 April.
  C. Social Coordinator - New member has volunteered
  D. Store Keeper - Ann Proctor. Absent.
X. Unfinished Business - none discussed
XI. New Business - none
XII. Meeting adjourned by President John Massie at 8:35 PM.

**Respectfully Submitted**
John M McGrath MD COL (RET) USA

# Federation News Post

American Federation of Mineralogical Societies
Rocky Mountain Federation of Mineralogical Societies

**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.

## Curiosity Got the Best of me: The Thallium Sulfosalt Rouxelite

Mike Nelson
csrockguy@yahoo.com

*Curiosity is the wick in the candle of learning.*
- W.A. Ward

My life is approaching eight decades, and I seem to have spent several of these years daydreaming! Is that a normal situation? Well, that thought aroused my curiosity and I located a paper stating that scientists agree that we (the average person?) spend 30% - 50% of our time in daydreams (Franklin and others, 2013). And, mind wandering may enhance your creative mood. Yea, sounds good to me!

I think most of my wind wandering, then and now, is associated with curiosity, an eager desire to know or learn about something. The other night I was relaxing my mind watching a candle slowly burn and flicker and for some "strange" reason I thought of the mineral rouxelite stashed in my mineral drawer---the who (named it), when (was the initial description), what (is it), where (does it occur), and why (am I interested), the five Ws of mineral curiosity. So, that is how this little story on a strange and rare mineral all started.

Any answers to satisfy my mind about rouxelite had to start with the sulfosalts. These minerals are members of the sulfide group (sulfur is the major anion) and are quite complex minerals, at least to an ole plugger like me. Common sulfides include well known minerals like galena, lead sulfide, and pyrite, iron disulfide. In a couple of previous *Pick & Pack* articles, I "described" the sulfosalts cylindrite ($FePb_3Sn_4Sb_2S_{14}$) in 2017 and dufrènoysite [$Pb_2As_2S_5$] in 2019.

Sulfosalts 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 the above noted cylindrite, iron, lead, and tin (metals) combine with the semi-metal antimony and the non-metal sulfur. In dufrènoysite the metal lead combines with the semi-metal arsenic and sulfur. 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. All are interesting elements: each semi-metal takes several different forms, 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 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 (after oxygen) but does not occur uncombined in nature. So, these are the semi-metals and sulfosalts. Interesting? Yes!

At 2022 Tucson I had several good conversations with a European dealer on some slow days and learned much. He also pulled out of his collection a specimen of rouxelite and noted that this mineral was quite rare and was only described in 2005. I looked at the micro through a loupe and it was a gorgeous mineral and so I brought it home.


**Above, and next column:** Rouxelite crystals from the Sant'Olga tunnel, Monte Arsiccio Mine. The longer whiskers are ~ 2 mm in length. *Photos: M. Nelson*


Crystals of rouxelite [$Cu_2HgPb_{23}Sb_{27}S_{65.5}$] are acicular, elongated and striated, black in color but at times with a bluish violet iridescence, and have a metallic luster. They belong to the Monoclinic Crystal System, Prismatic Class. MinDat noted that the hardness of rouxelite could not be measured, and no cleavage was observed.

The Type Specimen of rouxelite is from the Buca della Vena mine, Apuan Alps, Tuscany Italy, where it actually is quite rare. The mine is a small iron-barite deposit in the Apuan Alps and represents a complex mineralogy (with no mining past 1988). Many lead–antimony sulfosalts have been collected from the mine (79 valid minerals including 14 Types). Like the other lead sulfosalts, rouxelite was formed in the latest stage of hydrothermal activity, within small veinlets cross-cutting dolomitic lenses interstratified in the iron-barite ore (Orlandi and others, 2005). Distribution of rouxelite in Tuscany is limited to an area from the Buca della Vena Fe-Ba deposit, near the village of Ponte Stazzemese, then extending about 11 km southwest to the Sant'Olga tunnel, Monte

Arsiccio mine, near Sant'Anna di Stazzema. The only other know rouxelite specimens are from the Magurka antimony deposit, Slovakia. Indeed, it is a rare mineral (www.handbookofmineralogy.org/pdfs/rouxelite.pdf).


**Above:** Map showing the Italian Tuscany region's lead sulfosalt area and mines from Buca della Vena southwest to St Olga Tunnel at the Monte Arsiccio Mine. *Figure from D'Orazio and others (2021).*

My specimen came from the St. Olga Tunnel which is, to the best of my knowledge, an opening into the Monte Arsiccio Mine. The mine was the economically the most important pyrite ± baryte ± iron oxide deposit in the Apuan Alps. The orebodies are hosted within a Paleozoic metavolcanic–metasedimentary sequence, locally tourmalinized, close to the contact with the overlying Triassic metadolostone ("Grezzoni" Formation), belonging to the Apuane Unit (D'Orazio and others, 2021).

The rouxelite from the Monte Arsiccio Mine (72 valid minerals including 13 types) was the most recent locality described (Biagioni and others, 2014). Perhaps the most interesting aspect of this locality is that electronic gizmos (Inductively Coupled Plasma Mass Spectrometry) show there is a widespread substitution of Hg (mercury) by Ag (silver) and some incorporation of Tl (thallium) with the silver and therefore is a new example of a thallium sulfosalt (D'Orazio and others, 2021). This seemingly obscure notation may be important since thallium is a highly toxic metal associated with low-temperature hydrothermal mineralization. Weathering and oxidation of sulfides (including sulfosalts) may generate acid drainage with a high concentration of thallium and may pose a threat to surrounding environments.

At the end of this little exercise on a rare and complex mineral the question is—why learn about rouxelite? Well, to quote B.B. King,

*The beautiful thing about learning is that no one can take it away from you.*

Readers: keep on daydreaming!

**REFERENCES CITED**


Biagioni, C., Y. Moelo, and P. Orlandi, Paolo, 2014. Lead-antimony sulfosalts from Tuscany (Italy). XV. (Tl-Ag)-bearing rouxelite from Monte Arsiccio mine: Occurrence and crystal chemistry. Mineralogical Magazine. Vol. 78.

D'Orazio, M.; Mauro, D.; Valerio, M.; Biagioni, C., 2021, Secondary Sulfates from the Monte Arsiccio Mine (Apuan Alps, Tuscany, Italy): Trace-Element Budget and Role in the Formation of Acid Mine Drainage: Minerals, vol. 11, no. 2.

Franklin M.S., M.D. Mrazek, C.L Anderson, J. Smallwood, A. Kingstone, and J.W Schooler JW., 2013, The silver lining of a mind in the clouds: interesting musings are associated with positive mood while mind-wandering: Front Psychology, vol. 4.

Orlandi P, Meerschaut A, Moelo Y, Palvadeau P, Leone P, 2005, Lead-antimony sulfosalts from Tuscany (Italy). VIII. Rouxelite, $Cu_2HgPb_{22}Sb_{28}S_{64}(O,S)_2$, A new sulfosalt from Buca Della Vena mine, Apuan Alps: definition and crystal structure The Canadian Mineralogist 43 919-933.

Richards, J.P., 1999, Encyclopedia of Geochemistry in Encyclopedia of Earth Sciences Series, C.P Marshall and R.W. Fairbridge, eds.: Springer Netherlands.

Zhao, F. and S. Gu, 2021, Secondary sulfate minerals from thallium mineralized areas: Their formation and environmental significance: Minerals, vol. 11, no. 8.

Pebble Pups
David St. John

# CSMS Pebble Pups and Earth Science Scholars

## Pebble Pups and Earth Scholars

Pebble Pups and Earth Scholars are meeting at the East Library on Tuesday the 4th of April at 4:15 PM - 5:15 PM in room F1 near the children's section. The topic will be fossils and how they form with fun activities, treats, and samples to take home. I would encourage the pups to help write a poem
or bring their own to share with our club. Please bring any fossils you would like to show and tell as well. Hope to see you all there. The fossil dig tub and new lighted magnify lamp will be at this meeting.

## Donations

Donations for the Youth Program for the June Show and Outreach programs are essential to our club mission of promoting the rockhounding hobby for a lifetime.

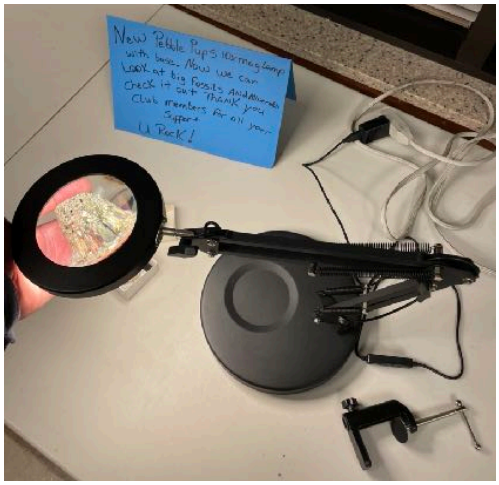
Big shout out to Urban Turzi, former CSMS President, for his recent donations to the Pebble Pups and Earth Scholars program. Our greatest asset is the members of this club and the wisdom, relationships, and passion to share with the next generation of rockhounds.

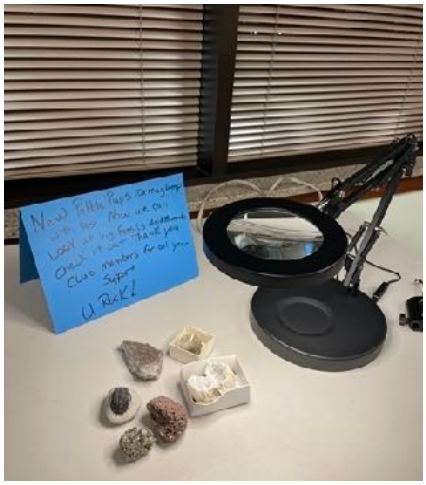
## The Pups' Mineral Collection

We are going to have a display case with Pebble Pups and Earth Scholars' very own minerals, rock, and fossils for all to see. Let me know if you want to loan something and make us a celebrity rock star.

## New Magnification Lamp

We a new magnification lamp for the Pebble Pups. The lamp is easier to use than a microscope. With a magnification lamp, a sample can simply be placed under the lens and rough adjustments made easily.





## Upcoming Events

**Saturday 22 Apr 23**, 10 AM - 1 PM: Royal Gorge Museum Hike with a Paleontologist; $5 fee 12 & older.

**Saturday 22 Apr 23**, Earth Day - go for a walk to celebrate!

**Time in Florissant**
By Steven Wade Veatch

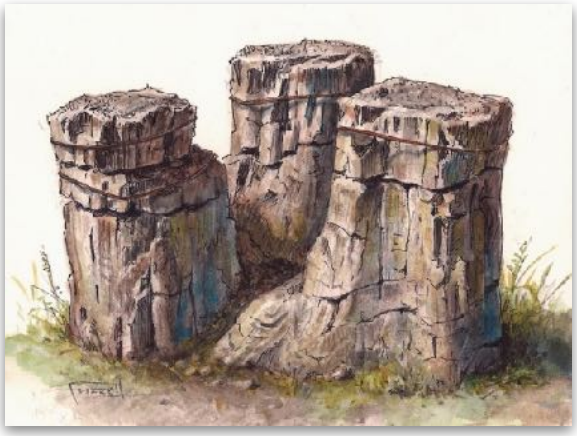
The valley is the way it should be,
formed over an endless flow of time.
Volcanoes erupted:
Mudflows
rushed
downhill
mixing rocks, boulders, and soil—knocking down trees,
tossing them like twigs, snapping them apart,
and burying them. Time turned trees into stone.

From this destruction a lake formed.
Water skippers danced on its surface,
caddis flies landed on nearby willows,
and fish lurked in its depths.

Consider the fossil insects and plants trapped
in layers of time; and a sleeping mammoth
at rest on a layer of lost pollen, covered
with Ice Age gravels.

An old homestead sits by Grape Creek,
its timbers whisper the past of early settlers.
A few pine trees, marked by the Ute people,
show this was once their home.

This land, where life has stretched
across time, from past to present,
magnifies how short time is for me,
and just when I learn
how to live,
it's over.

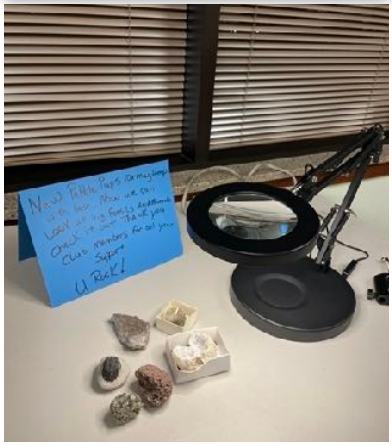


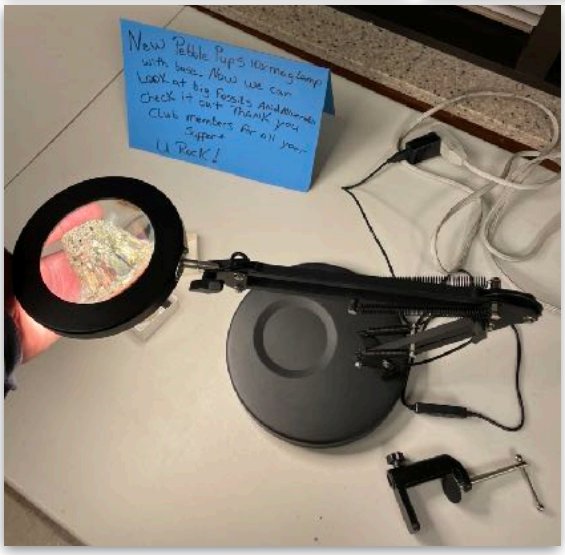
Petrified redwood "Trio" at the Florissant Fossil Beds.
*Original artwork by Charles Frizzell.*

national
poetry month

REPORT
General Assembly 16 Mar 23

37 rockhounds gathered on a chilly Thursday night at Mt Carmel Veteran Center for general assembly. We heard a great talk from Dan Zellner, titled “Evaporate Minerals of the Searles Lake Deposit” and he brought samples. Thanks Dan! Pebble Pup leader David St John showed us the group’s new magnification lamp and samples to try it out with. After a break and refreshments, we conducted the usual societal business and gave away 8 free minerals by random drawing.




## The Florissant Fossil Beds, Colorado: A Place of Change

By Steven Wade Veatch

In 1965—when I was a boy—I picked up a chunk of petrified wood (about 34 million years old, or Late Eocene age) at the Florissant fossil beds and wondered how it was formed. This simple act changed my life: it started me on my lifelong hobby of collecting rocks, minerals, and fossils, and later influenced my decision to study science at college. Both were big and long-lasting changes in my life.

**Above:** Steven Veatch (11 years old) and his brother Greg Veatch (4 years old) sitting at the Big Stump at the fossil beds in 1965. This was when the park was a private tourist enterprise.

Years later, I experienced another transforming moment—meeting legendary scientist Estella Leopold at the fossil beds. On that special day, Estella and I ambled along the trail to the petrified stumps, deep in our thoughts. We plunked down on a park bench and chatted the afternoon away while sharing the excitement of Ice Age pollen discovered in a Pleistocene rock layer at the fossil beds. We shared a singular purpose then—to reveal a part of the Ice Age here at the fossil beds. Because the record of Ice Age pollen in the Rocky Mountains was limited, our work on Florissant's Ice Age pollen was important.

The Florissant Fossil Beds is also a place of change. Its landscape is a mosaic of montane forests and rich meadows enfolded in ever-shifting patterns of light, sound, and fragrance. It is a gateway to nature, to the past, and to the present. It is a tale of imagination, of scientific exploration, and of the Ute people. Whenever I visit, I find myself sinking mindlessly into its petrified past while I ponder its present.

The natural beauty at the fossil beds is also an invitation to explore its possibilities, to plunge into the forest and consider the flight of pollen grains, borne on a morning breeze. Or to follow a moss spore's journey. Water moves slowly through Grape Creek. Moss-covered boulders slow the creek, making small pools. Gnats flutter above the creek, and green grasses, dotted with wild iris and other wildflowers, line its banks. Springs, coming from deep inside the ground, help feed the watercourse. I can feel this stream and its sounds deep within my soul. It is sublime.

My wife and I walk the forest trails often, and the landscape feels alive. Beard lichen's wiry hair drops from forked branches. Chickadees and woodpeckers live with owls, deer, and black bears. There is a forest symphony of sounds composed of hums, trills, chatters, and peeps. Frogs call their mates, Wind stirs through the trees, rustles branches, and knocks down yellow mists of ponderosa pollen. Black Abert squirrels leave a litter of chewed cones and tiny twigs, stripped of their bark, on the ground. In the

**Above:** Grape Creek in the fall. *Photo date 2018 by S. W Veatch.*

winter, these cones, seeds, and twigs lie on the snow, showing that these squirrels do not hibernate. In the spring, pasque flowers poke up through the fallen pine needles and bloom in a soft lavender.

**Above:** A pasque flower, a harbinger of spring, blooms at the Florissant Fossil Beds. *Photo date 2019 bv S. W Veatch.*

I notice the slow changes to a rotting log on the fossil bed's forest floor. The log shows the passage of time on a different scale: the time it takes for a big, downed tree to be transformed back into soil—two centuries, or about seven human generations.

Brimming with life, the log—now crumbled bits and pieces of wood covered with leaf litter—is a habitat for many species. Beetles chew the wood, forming serpentine galleries beneath the bark. Colonies of ants live in the cavities, forage for food, and remain subordinate to the mother queen. A mouse lives beneath the log's rotting roots; fungal strands penetrate the decaying wood. Patches of lichen and moss grow green on its surface. Spiders spin webs on spindly branches.

The log is now a spongy, mossy mound that once was a living tree. In this thriving microcosm of decay-dwelling species, there is a quiet yet energetic chemical factory recycling nutrients and organic matter. Altogether, this log, and others like it, nurture the forest by adding nutrients that sustain its health. And so it is that this landscape "nurses" my spirit.

There are other beneficial changes at the fossil beds. A combination of lightning strikes, a dry forest, and dry winds can cause a wildfire, which spreads across the landscape, bringing sudden change. Ponderosa pines are resistant to fire due to their thick bark and limbs that extend above the forest floor. Fire maintains the ponderosa pine forest by killing off competing trees. The ash from wildfires revitalizes the forest.

Change at Florissant comes in many ways with the cycles of day and night. The red dawn splashes the sky with morning possibilities. The midday sun floods the valley with brightness while the spires of green trees poke at the sky. Wavering shafts of afternoon sunlight reach the forest floor. After sundown, the twilight spreads like ether, and the mountains cool like stone while the valley fills with a flood of moonlight. The stars become pinpricks that sizzle in the night sky. The circling seasons of the Sun, snow and

rain bring change on a longer scale. Summer sunlight falls from unbelievably blue skies. There is music in the rain as it slaps aspen leaves, bounces, and splats on the ground before it disappears into the soil. In the fall, the air is crisp, and the aspen leaves are a brush stroke of radiant gold and orange. In the winter, elk weave tracks across snowy slopes. Coyotes send their penetrating calls bouncing across the white meadows when the frosty night comes on.

**Above:** Raindrops bead up on aspen leaves at the park. *Photo date 2014 by S. W Veatch.*

Physical processes, such as the imperceptible progress of drifting continents, erosion, soil formation, or freeze-thaw cycles, bring change. And there are more rapid agents of disturbance—such as nearby volcanic eruptions that occurred 34 million years ago. These cataclysms sent flows of mud coursing down the river valley, forming a dam and lake that transformed organisms into fossils. The mud also surrounded the bases of trees, and, over time, petrified them.

Today, petrified stumps stand like sentinels in the forest. Lichens cling to petrified wood like starfish on rocks. Kingdoms of moss stake their claims on fossil tree stumps. Whenever I hold a Florissant fossil or look at a stone stump, I experience the physical vastness of time and space.

Cultural change is a part of the fabric of this land of petrified forests and fossils. This was first the home of the Ute people, where their elders said you could learn a lot from listening to the land. The land was taken from the Utes, and these people were sent to less desirable places to subsist. I find evidence of these people today in the trees they modified or by finding an occasional arrowhead that is washed to the surface by summer rains. Roads brought homesteaders, who worked the land. Nearby goldfields intensified settlement.

**Above:** A National Park Service archaeologist points out a peeled or culturally modified tree at the monument. The Utes used the bark for cradle boards and scraped the cambium layer for food and medicine. *Photo date 2004 by S. W. Veatch.*

Lastly, the values of people change. After decades of being a commercial tourist attraction, people wanted to preserve the fossil beds. Activists, including Estella Leopold, helped to prevent the destruction of the fossil beds until the National Park Service

could preserve the area for future generations. Outside the park, the forest and meadows were plowed under by bulldozers, subdivided, and further broken up by lots, fences, and roads.


**Above:** Advertisement for one of two tourist establishments at the fossil beds circa 1965. *From the S. W. Veatch collection.*

Forests change, species evolve, and life proceeds. Today, the beauty of this place invites overuse, while the effects of climate change threaten the fossil beds with future habitat destruction and species extinction.

For me, the Florissant landscape is a sacred place: A place of change, a place to meditate and scribble in a journal—a place to gain insight into how to live my life. It positioned me to think about time and change, to peer into the past and imagine the future. And to feel the present while I reflect on life, death, order, disorder, continuity, and change.

**About the author:** Steven is a geologist who joined the CSMS when he was 10, in 1965. The club met at that time at the old IBEW hall near the west side of the city. His complete profile is available at:

https://www.blogger.com/profile/06566101278318062273

# 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

subject to change

**April** 15th: Rocky Mountain High claims
22nd: April Fool's claim

**May** 6th: Rocky Mountain High Claims
20th: Wyoming Fossil Safari
27th: New Hope Amethyst claim - Cañon City

**July** 1st: RMH with Lake George club, limit 10-15
15th: Wigwam Claims - Lake George club limit of 25
22-23: Crystal Park, Montana

**August** 5th: NH Amethyst Claim

**September** 9th: Cañon City Claim

**October** 7th: Cañon City Claim

Questions: contact CSMS Field Trip Planner
Kyle Atkinson atkinson.kyl@gmail.com 719-453-3653

## Geo-caching with CSMS

CSMS is geo-caching. Visit the CSMS geo-cache website (link below) for everything you need to know about finding CSMS geo-caches. Rockhounds go!

*https://www.geocaching.com/geocache/GCA1WXD_colorado-springs-mineralogical-society*

# Pike's Peak Gem & Mineral Show

Presented by the Colorado Springs Mineralogical Society
June 9 - 11 2023, 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: |
|---|---|
| | |

| Address: |
|---|
| |

| Phone: | Email: |
|---|---|
| | |

| City: | State: | Zip: |
|---|---|---|
| | | |

Describe display or cases:

| | | | |
|---|---|---|---|
| | I will bring my own display | Your case length: | # of cases: |
| | 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 7 PM on Thursday 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.*

# How to do a Case for the Show

Bob Landgraf - recipient, DGMG People's Choice Award
Adapted from Denver Gem and Mineral Guild

## *THE BASICS*

- You only have to fill a space that is about 35" x 23" with specimens. That means you will probably need about 15 to 25 specimens.
- Don't be concerned that your specimens "are not worthy" – the presentation is the thing.
- Here are the major tasks you have to accomplish – in sequential order:
  1. Build a set of "liners" for each case you want to exhibit. A set of liners consists of:
     — A "Back Panel"
     — A "Floor Panel"
     — Two "Side Panels"
     — Each of the panels needs to be covered with cloth.
  2. If you wish, you can add risers, steps, "floating" platforms, or other items to help display your specimens.
  3. Choose the specimens you want to display.
  4. Create labels for each specimen and for the case.
  5. Create the desired layout at home.
  6. At the show, add the liners to the case and adjust the liners if necessary. Clean the liners before adding the specimens.
  7. Carefully add your specimens to the case.
  8. Clean the glass front panel and secure it to the case.

## *THE ROCKS*

- One really good rule is to avoid putting too many specimens in the case!
- If you have more specimens than will fit in a case, make another case!
- Most people have a tendency to try to put too many in, even when they think about it.
- Taking two or three specimens out and spreading the remaining specimens will often make a dramatic improvement in a case's appearance.
- Having several steps or separate risers in a case will allow you to put in more rocks without things looking as crowded.
- Though it is always best to lay out the case ahead of time at home, take an extra specimen or two to "fine tune" the arrangement with different specimens while setting up the case.
- After you make the arrangement at home be sure to number the bottom or back of the labels so that you can remember the order you planned.
- After you have finished and are absolutely sure it is right, try taking a specimen or two out of the case to see if that improves the look.
- Without trying to be slavishly tied to a symmetry a generally balanced appearance (color, brightness and especially size) helps. A trick to check this is to step back and squint, such that details aren't noticeable, but just the general form and colors.
- It is best that the case contains specimens that are approximately the same size. An alternative that may work is to have one or more large specimens surrounded by smaller ones.

**Tips about specimens**

1. If you plan to wash specimens before setting up your display, allow a few days for them to dry thoroughly. Otherwise, heat from the lights can cause moisture to form inside the case.
2. Wear thin white gloves when setting up your display to avoid getting fingerprints on crystal faces and other shiny surfaces.
3. Bring paper towels and glass cleaner, tape for removing lint, a ruler to check your spacing and alignment, and extra mounting materials.

## *LINERS*

OVERVIEW

- Liners are required for any cases you do for the CSMS show.
- The best way to carry the liners is probably one or more large black plastic garbage bags.
- Make sure the liner pieces all fit snugly together so you can't see gaps or the wood of the case between the panels.

**Tips about liners**

1. To make the liners fit tightly, you can make the liners a little smaller – maybe 1/4 inch or so. Then, you can stuff extra cardboard or wrinkled up newspaper as spacer material behind the back and on the outside of the sides such that the spacer material doesn't show.
2. If the liners are too wide on the sides with a relatively soft spacer behind the back, tightening up the front of the case forces the side liners back and makes everything more secure.
3. If you make the back liner deliberately a little too tall and bend it forward, it will act as a reflector and will hold the side panels in place.
4. If you make the liners the proper size so that the back rests on the bottom piece and the sides push against the back piece, the joints/seams are less apparent and any imperfections in the edges are less noticeable.

**[Warning:]** Don't make the mistake of using backing material that is too heavy. One of our more illustrious members once used dry wall and the back fell over and virtually destroyed some expensive and cherished specimens.

STIFF BACKING MATERIAL

- Cardboard
- Coroplast
  - — Corrugated plastic
  - — Less likely to bend and break than cardboard
  - — Makes it easy to post photos and letters
- Use rubber cement, Weldwood cement, hot melt glue, "tacky glue," or duct tape to attach the cloth to the backing.

COVERINGS USED ON THE BACKING MATERIALS

- Carpet
  - — Advantages: easy to clean, lasts forever
  - — Cut to fit case
  - — Short nap, conservative color
  - — Can be glued to liner backing with Super Glue or carpet cement
- Felt
  - — Advantages: no wrinkles, lots of stretch
  - — Glue to liner backing with spray rubber glue
- Patterned paneling – stones, wood, etc

COLORS FOR THE LINER FABRIC

- Be careful – Garish colors can be an absolute turn-off or "show-stopper".
- Consider the colors of the specimens you are displaying when deciding what color background to use. You need to have good contrast between the specimens and the background color. For example, don't use a bright red background if you are going to display bright red minerals. The minerals will fade into the background.
- Light colors
  - — Don't show the lint
  - — Do make the cracks/seams between liner components more obvious than dark colors
  - — Are harder to keep clean
- Dark colors
  - — easier to keep clean
  - — do a good job of hiding the cracks/seams between liner components
  - — require a lint-picker roller to clean off anything white or light
- Mottled or Tweedy

**[Note:]** If you only want to make one set of liners, pick neutral colors that will be OK no matter what color specimens you put on them.

TYPE OF FABRICS USED FOR LINERS
Make it easy to clean – and easy to remove from the backing - if you are going to use it a lot.

SMOOTH OR GLOSSY CLOTH
- If you have glossy specimens such as quartz, a rough-textured cloth such as burlap will work.
- With rough rocks such as ore minerals or fossils, a smooth cloth might look better.

## *RISERS, FLOATERS AND SHAPES*

OVERVIEW
· Use all of the case, not just the lower 12 inches.
· Take advantage of all the space.
· Don't put signs or labels on the sides of the case liners.

RISERS
· A 2-tier set of risers is the most common.
· 4 – 6 inches in height seems to be normal.
· You can vary the heights of risers within a case.

FLOATERS
· Use a dark cloth/covering.
· Cover the supports with dark material so they can't be seen.
· Keep the support materials back from the front of the floating shape so they won't be seen. .
· Make the support material for a floating shape big enough so the shape/board won't tip.

> **Tip about "floaters"** - Look around at work or home for riser materials to create new affects. Some large plastic disks at work gave Bob the idea for his and Janie's case with the "floating" round risers.

FREEFORM SHAPES DRAPED WITH CLOTH
- Shapes to consider
  - — Bricks
  - — Logs
  - — Wood blocks
  - — Plastic holders
  - — Glass jars
  - — VCR boxes
  - — Rock tumblers
- Possibilities for arrangement of shapes
  - — Up & down
  - — Ascending size
  - — Each specimen sits on top of its own shape
  - — Draw the viewers into the center of the case – where the specimens are.
- Avoid wrinkles, pleats and folds if at all possible.

> **[Note:]** It is possible that that irregular, free form riser shapes can work better than shapes that are too geometrically regular. Use your imagination.

## *LIGHTING*

- Make sure the whole case well lit
- Watch out for shadows - especially under any risers
- You might want to consider adding more lights. You can do this without drawing any more current than the standard pair of 75-watt bulbs. Use a Y-type adapter and two bulbs – a 50-watt clear incandescent bulb and a 25-watt fluorescent bulb in each light socket. This combination produces about twice the light of the standard 75-watt incandescent bulbs. The clear bulbs seem to give more "sparkle" to the specimen whether or not you use the fluorescent bulbs.

  **[Note:]** In competition, we are often restricted as to the type of bulb we can use. Check the rules.

  **[Warning:]** If you want to use bulbs other than what is provided, make sure their heat won't damage your specimens.

- Even when using dark risers, you can use white back and side liners to reflect more light on the specimens.

## *LABELS*

OVERVIEW

- Always label your specimens. Viewers learn nothing from specimens that have no labels.
- Make labels the least inconspicuous thing in the case – but not invisible!
- The label should not dominate the case.
- When you look at the display, ask yourself: What is the first thing I see – labels or specimens?
- Case Title label
  - — 36 point type or larger
  - — Usually centered within the case

  **[Note:]** If the Case Label is on the back panel of the case, make sure it is low enough to be easily read when the glass front is placed on the case.
- After you make the arrangement at home be sure to number the bottom of the labels so that you can remember the order in which you plan to display the specimens.
- Don't put signs or labels on the glass or on the side case liners.

INFORMATION ON LABELS

- Include a location as complete as possible – unless the rocks are all from the same location.
- Often descriptions (crystal class, twinning, type location, or any other information that might be of interest) can be added.
- All labels should be consistent in their layout, typeface, and information contained.
- For more formal/serious shows, check to see if there are specific labeling requirements.

PHYSICAL CONSIDERATIONS FOR LABELS

- Match/blend colors with the case liner.
- Off-white is better than pure white.
- Make the labels uniform in size.
- Legibility – two different points of view:
  - — Make the labels legible from 4 feet away
  - — Viewers should be able to read the labels when standing in front of the case.
- For computer-generated labels, a 14-point sans serif typeface works best. A sample of this size font is shown below.

  This is a 14-point sans serif typeface
- Propping labels up for readability
  - — Just fold down the back of a card-stock label.
  - — Use folded card stock glued to back of label.
  - — Put one or two ." nuts in back of the label.
  - — Use a grooved piece of wood or Plexiglas.
  - — Allow space on the bottom of the holder label if you use a grooved wood or plastic holder.

  **[Note:]** It is OK to lay labels flat if they can be easily read.

TYPE OF MATERIAL USED FOR LABELS

- Many labels used today are either computer-generated or made on a label maker. If you have a PC and access to Microsoft Word, almost any "computer person" can help you create a template you can use for just about any size label.
- Card Stock with back folded up.
- Laminated.
- Transparent labels on glass slide mounts.

PARTING THOUGHTS

- The best thing to remember is to use your own imagination for your particular display. Often very striking effects can be achieved by using mirrors, back (or underneath) lighting, including artifacts, descriptive text, or whatever.
- One year Francis did a very whimsical (if unscientific) case with rocks and stuffed animals. While this type of thing may offend some sensibilities, it is the sort of thing that is attractive to the average, non-initiated viewer.
- Glen's stamp and mineral case is another example of a different approach that catches the eye.
- Don't be intimidated by what others do or by anything in this handout either. Let your imagination run wild. It will make it more fun for you and the viewer.
- Don't worry about whether your specimens are rare and valuable – the presentation is the thing!

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