

THE BULLETIN OF THE COLORADO SPRINGS MINERALOGICAL SOCIETY Published Since 1960

Colorado Springs
Mineralogical Society
Founded in 1936
Lazard Cahn
Honorary President
April 2018
PICK&PACK

Vol 58... Number #3

CSMS General Assembly

Thursday, April 19, 7:00 PM

Speaker: Amy Titterington

Topic: The Forest Service Permitting Process

**Please note: Members whose last names begin with A—L
are responsible for refreshments in April**

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

Inside this Issue:

CSMS Calendar & Other Events	Pg 2
Field Trip Info	Pgs 4 & 11
Tucson Gem & Mineral Show	Pg 5
Pebble Pups	Pg. 8
Secretary's Spot	Pg 9
Club Activities and Photos	Pg14
June Show Info	Pgs 12-16
Classifieds	Pg17

More about April's Presentation

Amy Titterington, US Forest Service Geologist, will present "The Forest Service Permitting Process." Topics will include the 5 stages of mining: prospecting, exploration, development, production, and reclamation, a brief statement on what rights our members have as claimants on National Forest land, and which activities require what level of permits (NOI vs Plan of Operation).

Announcement regarding "Goodies" at the General Assembly Meetings

A decision was made at the February General Assembly to use the following method of assigning responsibility for the refreshments at our monthly meetings:
It was determined that members whose last names begin with A – L should bring goodies on even months and members whose last names begin with M – Z should bring goodies on odd months.

CSMS Calendar

April & May 2018

- Thu., **Apr. 5 & May 3** — **Board Meeting**, 7p.m., Pikes Peak United Methodist Church
- Tue., **Apr. 3 & May 1** — **Fossil Group**, 7p.m., Methodist Church, Jerry Suchan, 303 648-3410
- Thu., **Apr. 19 & May 17** — **Pebble Pups & Jrs**, 5:30p.m., Mt. Carmel Ctr., Steve Veatch, 719 748-5010
- Thu., **Apr. 19 & May 17** — **General Assembly**, 7p.m., Mt. Carmel Center
- Thu., **Apr. 26 & May 24** — **Crystal Group**, 7p.m., Mt. Carmel Center, Kevin Witte, 719 638-7919
- Thu., **Apr. 26 & May 24** — **Faceting Group** 7p.m., Medina's home, John Massie, 719 338-4276
- Note: The Micromount Group is not meeting at this time. If you are interested in meeting, please call Dave Olsen, 719 495-8720**
- Appointment Only—Jewelry Group**, Bill Arnson, 719 337-8070
- Appointment Only—Lapidary Group**, Sharon Holte, 719 217-5683

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

Upcoming Events of Interest to CSMS Members

Submitted by Pete Modreski

Tues., Apr. 3, 10:30 a.m., USGS Rocky Mountain Science Seminar, Building 25 Lecture Hall, Denver Federal Center, "**Three ways to evaluate how well we know the carbon cycle**", by Mary Whelan, Carnegie Inst./Stanford Univ.

Wed., Apr. 4, 4:00 p.m., CU Geological Science Colloquium, **Emplacement and exhumation of a Laramide subduction complex in western Arizona**, John Singleton, CSU. Benson Earth Sciences Building Auditorium 180; social hour with refreshments follows in Benson 185. All are welcome.

Thurs., Apr. 5, 4:00 p.m., Van Tuyl lecture at Colorado School of Mines, **Precambrian Layered Mafic Intrusions (?) of the Zimbabwean Craton: Their Economic Importance and Origin**, by Jeff Chaumba, University of North Carolina at Pembroke. Berthoud Hall Room 241; all are welcome.

Thurs., Apr. 12, 4:00 p.m., Van Tuyl lecture at Colorado School of Mines, **Alpine Hydrogeology: The Critical Role of Groundwater in Sourcing the Headwaters of the World**, by Masaki Hayashi, Univ. of Calgary. Berthoud Hall Room 241; all are welcome.

Thurs., Apr. 12, Colorado Scientific Society's annual **Past Presidents' Dinner**, to be held at Mt. Vernon Country Club, featuring a presentation on **Colorado's Exciting New Dinosaurs** by Dr. Joe Sertich, Denver Museum of Nature and Science. Details will be announced.

Fri., Apr. 13, 4:00 p.m., CU Geological Science Colloquium, **Masaki Hayashi, Darcy Distinguished Lecture**, Univ. of Calgary (title TBA). Benson Earth Sciences Building Auditorium 180; social hour with refreshments follows in Benson 185. All are welcome.

Fri., Apr. 13, North Jeffco Gem & Mineral Club Silent Auction, APEX Community Recreation Center, 6842 Wadsworth Blvd., Arvada. Auction begins at 6:45 p.m.; all are welcome. For more information call Bill Jones at 303-503-6288 or email at sidewindermin@comcast.net.

Fri.-Sat.-Sun., Apr. 13-15, Colorado Mineral & Fossil Spring Show, Crowne Plaza Hotel DIA, 15500 E 40th Ave., Denver CO. Free admission; hours 9-6 Fri. & Sat., 10-5 Sun.

Sat., Apr. 14, Denver 2018 March for Science; see <http://marchforsciencedenver.org/>.

Sunday, Apr. 15, a Colorado Scientific Society Spring Field Trip: "**Mysterious Front Range Gravels**", led by Cal Ruleman & Bob Reynolds. Details TBA.

Tues., Apr. 17, 10:30 a.m., USGS Rocky Mountain Science Seminar, Building 25 Lecture Hall, Denver Federal Center, "**Emplacement and exhumation of a Laramide subduction complex in western Arizona**", by John Singleton, CSU.

(Continued on page 3)

(CONTINUED FROM PAGE 2)

Wed., Apr. 18, 4:00 p.m., CU Geological Science Colloquium, **Chris Scholz, AAPG Distinguished Lecturer**, Syracuse Univ. (title TBA), Benson Earth Sciences Building Auditorium 180; social hour with refreshments follows in Benson 185. All are welcome.

Thurs., Apr. 19, 4:00 p.m., Van Tuyl lecture at Colorado School of Mines, **Probing Weathered Bedrock in Earth's Critical Zone: Rock Moisture and its Implications for Weathering and Biogeochemical Processes**, by Daniella Rempe, Jackson School of Geosciences, University of Texas at Austin. Berthoud Hall Room 241; all are welcome.

Thurs., Apr. 19, 7:00 p.m., Colorado Scientific Society meeting, a pair of talks on **The role of the USGS and the Colorado Geological Survey**; by Eugene (Buddy) Schweig, Director, USGS Geosciences and Environmental Change Science Center, and Karen Berry, Director and State Geologist, Colorado Geological Survey.

Sun., Apr. 22, Earth Day Geology Hike, in Red Rocks Park (1 p.m.) with optional (12 noon) shared potluck lunch at the Discovery Center at Dinosaur Ridge. Meet at the Discovery Center, 17681 W. Alameda Parkway. At about 1 p.m. we'll drive to the Geologic Marker and hike the new Geologic Overlook Trail—a short, 3000' (3/5 mile) round trip, 240' elevation gain. We'll also demonstrate use of the "ROCKD" geologic map app. This will be a joint "general public" + Florissant Scientific Society event; all interested persons are invited. Contact Pete Modreski, pmodreski@aol.com, or (cell) 720-205-2553.

Wed., Apr. 25, 4:00 p.m., CU Geological Science Colloquium, **Geophysics from the Top-Down: the Exoplanet Opportunity**, by Nick Cowan, McGill Univ. Benson Earth Sciences Building Auditorium 180; social hour with refreshments follows in Benson 185. All are welcome.

Wed. & Thurs., Apr. 25-26, Robert Hazen, of the Carnegie Institution of Washington, will give several talks at Colorado School of Mines on the theme of **Mineral Evolution, Mineral Ecology, and "Big Data"**. Details will be announced.

Thurs., Apr. 26, 4:00 p.m., Van Tuyl lecture at Colorado School of Mines, **Algorithms for Hurricane Storm Surge Modeling: Current State and Future Outlook**, by Clint Dawson, Univ. of Texas at Austin. Berthoud Hall Room 241; all welcome.

Tues., May 1, 10:30 a.m., USGS Rocky Mountain Science Seminar, Building 25 Lecture Hall, Denver Federal Center, **"Exploring sedimentary environments in Gale Crater with the Mars Science Laboratory Rover"**, by Lauren Edgar, USGS – Flagstaff.

Thurs., May 3, 7:00 p.m., First Thursday lecture series of the Friends of the Colorado School of Mines Geology Museum, **The Colorado-Wyoming State Line Kimberlite District**, by Philip Persson. All are welcome. Expected location: Ben H. Parker Student Center, Ballroom "E", Maple Street, Golden.

Sat., May 5, 11 a.m. – 2:45 p.m., **Colorado Mineral Society Silent Auction**, Holy Shepherd Lutheran Church, 920 Kipling St. (3 blocks north of West 6th Ave.) Lakewood.

Tues., May 8, 6:00-8:00 p.m., "Golden Beer Talks", Johanna Kovarik, U.S. Forest Service, National Cave and Karst Program Coordinator. Windy Saddle Café, 1110 Washington Avenue, Golden. "Golden's grassroots version of TED talks, Expand your mind with a beer in your hand", see <http://goldenbeertalks.org/>. (Talk begins at about 6:35.)

Tues., May 8, 7:00 p.m., annual Emmons Lecture sponsored by the Colorado Scientific Society, **High drama at the Paleocene/Eocene boundary in the Bighorn Basin; implications for today**, by Will Clyde, University of New Hampshire. On the CSM campus, location TBA.

Thurs., May 10, 7:30 p.m., Friends of Mineralogy, Colorado Chapter, bimonthly meeting, at Lakeview Event Center, 7864 W. Jewell Ave.: **Five Days on Xuebaoding Mountain, Sichuan Province, China: minerals and geology**, by Markus Raschke, CU.

Sat., May 12, Dinosaur Discovery Day, featuring **Boy Scout Day** at Dinosaur Ridge, Morrison, CO. See www.dinoridge.org for full information.

Sun., May 20, 12 noon to 4 p.m., **Friends of Mineralogy, Colorado Chapter, Silent Auction**, at Clements Community Center, 1580 Yarrow St., Lakewood. All are welcome.

Fri.-Sat.-Sun., June 1-3, Pikes Peak Gem & Mineral Show, sponsored by the Colorado Springs Mineralogical Society; at the Norris-Penrose Event Center [new location], 1045 Lower Gold Camp Road #3, Colorado Springs.

Sun., June 17, will be the date of the once-yearly **Geology Train** on the Cumbres & Toltec Scenic Railroad, Antonito, CO. See their website, <http://cumbrestoltec.com/>.

For more lecture series during the year see:

Colorado Beer Talks (2nd Tuesday, 6-8 p.m.), Windy Saddle Café, 1110 Washington Avenue, Golden, "Golden's grassroots version of TED talks, Expand your mind with a beer in your hand", <http://goldenbeertalks.org/>

(Continued on page 4)

(CONTINUED FROM PAGE 3)

Colorado Café Scientifique in Denver, monthly lectures on science topics held either at Blake Street Station or Brooklyn's, Denver; open to the public, no charge other than refreshments you may choose to purchase; see <http://cafescicolorado.org/> .

Colorado Scientific Society (3rd Thursday, 7 p.m.), see <http://coloscisoc.org/> . Meets at Shepherd of the Hills Church, 11500 W. 20th Ave., Lakewood CO, except when noted.

CU Geological Science Colloquium (Wednesdays, 4 p.m.) see <http://www.colorado.edu/geologicalsciences/colloquium>

CSU Dept. of Geoscience Seminars (Fridays, 4 p.m.), see <https://warnercnr.colostate.edu/geosciences/geosciences-seminar-series/>

Van Tuyl Lecture Series, Colorado School of Mines, (Thursdays, 4 p.m.): <https://geology.mines.edu/events-calendar/lectures/>

Denver Mining Club (Mondays, 11:30), see <http://www.denverminingclub.org/> .

Denver Region Exploration Geologists Society (DREGS; 1st Monday, 7 p.m.), <http://www.dregs.org/index.html>

Florissant Scientific Society (FSS); meets monthly in various Front Range locations for a lecture or field trip; meeting locations vary, normally on Sundays at noon; all interested persons are welcome to attend the meetings and trips; see <http://www.fss-co.org/> for details and schedules.

Rocky Mountain Map Society (RMMS; Denver Public Library, Gates Room, 3rd Tuesday, 5:30 p.m.), <http://rmmaps.org/>

Western Interior Paleontology Society (WIPS; Denver Museum of Nature & Science, 2nd Monday, 7 p.m.), <http://westernpaleo.org/> . Meetings are held either in the Ricketson Auditorium or the Planetarium at the Denver Museum of Nature & Science, unless otherwise noted

CSMS 2018 Upcoming Field Trips

Book Cliffs, Grand Junction. April 27, 28 & 29

Leader: Mike Webb.

Contact: mwebbstudent@yahoo.com

Canon City,,Fremont, Co. May 9

Leader: Billy Bell.

Contact: magik4@yahoo.com

Cretaceous Ammonite Locality, Kremmling, CO. May 19

Guide: BLM Archeologist/Paleontologist Bill Wyatt

Leader: Mike Webb

Contact: mwebbstudent@yahoo.com

Victor Gold Mine Tour, Cripple Creek District, June 9

Leader: Steven Veatch

Contact: steve.veatch@gmail.com

Limited to 12 participants

Please see more important field trip info on Page 11

THE OTHER SHOWS AT TUCSON Part I

Mike Nelson csrockguy@yahoo.com

I wanted to send in the TGMS manuscript, the “Main Show” material, to the *Pick & Pack* (published in the March edition) before submitting some information on a few of the ancillary venues. I had high hopes of visiting perhaps 25 of the 45 or so smaller shows. Well, that dream simply did not materialize. There was so much to see and do, and I walk with a cane, and the food trucks were good and the coffee hot and strong and the jewelry shiny...So I have picked out a few of my favorite venues.



Fig. 1. I have always enjoyed the brecciated jasper termed mookite collected in Australia.



Fig. 2. There are always displays of magic minerals. In a couple of weeks, I am taking a piece of amethyst and heading to a vortex near Sedona.

One of the first shows I headed for was the 22nd Street Mineral Fossil and Gem Show, a cornucopia of pleasures (Figs. 1, 2). This is one of those shows that is hard to describe. There were numerous crystal “human” skulls for sale starting at a single dollar on up, tables of beads, and fossil replications (museum quality) worth hundreds of thousands of dollars. My major purchase was a grouping of Brazilian tourmalines crystals (Fig. 3). No, the crystals were not gemmy, but I liked the piece for display and it was in my monetary range (cheap) of \$5.



Fig. 3. Pink elbaite crystals in a off white matrix that is some sort of a feldspar mineral (maybe microcline, maybe not). Width of photo ~8 cm.

(Continued on page 6)

(CONTINUED FROM PAGE 5)

Tourmaline is now classified as the Tourmaline Group with several end-member species created by common solid solution series. Virtually every member of the Group seems in solid solution with other members. Every few years a new classification pops up. For example, on 1 February 2018, I noticed an abstract by Bosi stated that his new study “has direct implications for the tourmaline nomenclature, as well as on petrogenetic and provenance information. Some assumptions behind the classification scheme of tourmaline have been reformulated, revealing major agreement and significant improvements compared to earlier proposed scheme.” So, if you want the newest scoop locate his paper in the *American Mineralogist*. Otherwise I will offer some generalities

Tourmalines (refers to the Group) are boron silicate minerals with a large variety or combination of calcium, potassium, sodium, aluminum, iron, lithium, vanadium, magnesium, manganese, chromium cations (the positive charged elements) thrown in. The chemical formula is really hard to understand but I will toss out the general formula from www.mindat.org:



A = Ca, Na, K, or is vacant (large cations);

D = Al, Fe²⁺, Fe³⁺, Li, Mg²⁺, Mn²⁺ (intermediate to small cations - in valence balancing combinations when the A site is vacant);

G = Al, Cr³⁺, Fe³⁺, V³⁺ (small cations);

T = Si (and sometimes minor Al, B³⁺);

X = O and/or OH;

Z = F, O and/or OH.

As you can guess there is much cation substitution, so the group has many different varieties; MinDat lists 39 different “kinds” of tourmaline. A couple of members that many of us recognize would include the common black schorl and the pink elbaite. Bosi (2018) noted that “tourmalines form the most important boron rock-forming minerals on Earth.”

Elbaite, a sodium lithium aluminum boron silicate (in the formula above sodium would occupy Position A of large cations while lithium and aluminum occupy Position D of smaller cations). It is probably the most colorful of any of the Group members and in some case even bi-or tri-colored (for example the popular watermelon tourmaline). The best known colored elbaite is probably the pink variety, and that is what I purchased. Elbaite belongs to the Hexagonal Mineral System and often is found as elongated prismatic, striated crystals. They also have a very distinguishing rounded triangular cross section. Gemmy varieties are vitreous and transparent while less gemmy crystals are more translucent. Tourmaline is about the hardness of quartz at 7.0-7.5 (Mohs) and gemmy crystals of many colors are in high demand for faceting and setting in rings.

The seller stated that the specimen was from one of the mines in the State of Minas Gerais, Brazil----an area of hundreds or thousands of mines. MinDat states that “probably the best known of these are the pegmatite minerals like tourmaline, beryl, quartz etc. that come from the pegmatites in the north west granitic region of the state and whose center, business wise if not geologically is the town of Governador Valadares.” So, I will settle for that general area!

I though the pink color of elbaite was probably due to the high lithium content. However, in talking to a chemist friend I learned that lithium was probably color-neutral! I need to work on that nugget of information. I also understand that the lithium (and the boron) is very important in lowering the magma solidification temperature.

So, the Tourmaline Group is a very complex assemblage of minerals and understanding much of the mineral chemistry is above my pay grade. However, the various tourmalines often make spectacular gemstones and display specimens. I was impressed in observing a very large “pile” of these masses of crystals at the venue.

(Continued on page 7)



Fig. 4. The mineral rooms at the Westward Look Resort.

Each year the beautiful Westward Look Resort in the foothills west of the Catalina Mountains hosts a short (4 days) but fantastic show (Fig. 4). I believe there are ~40 dealers at the venue and all bring some of their most spectacular specimens (along with their spectacular prices—at least to an ole mineral bum like me). But, the exhibits in each room are open and free to the public for viewing (and buying). Most visitors attend the show since viewing the room showcases are like walking into a fine mineral museum. And, the dealers are more than happy (if their time permits) to have friendly conversations and answer questions.

The photographs below are certainly not professional and shot through the showcase glass (Figs. 5-7). But, perhaps the readers can get some sense of these nifty minerals.



Fig. 5. Sulfur crystals from Italy presented by Coloradoan Dave Buck



Fig. 6. Tough to get the correct green color on these emerald crystals (a variety of emerald). ~3.5 inches high. Rumor has it the price was \$200k but the crystals were clear and gorgeous.



Fig. 7. Brucite, a magnesium hydroxide mineral.

Please look for Part II of this article in the May issue of the Pick & Pack

PEBBLE PUPS CORNER



CSMS Pebble Pups & Junior Group

The Junior Group & Pebble Pups meet at the Senior Center every third Thursday at 5:30 PM until 6:15 PM or so. We only meet during the academic year, and we include January. So, it is Sept through May.

Special announcements and field trips are noted on our blog:

<http://pebblepups.blogspot.com>

and through the CSMS website:

<http://www.csms1936.com>

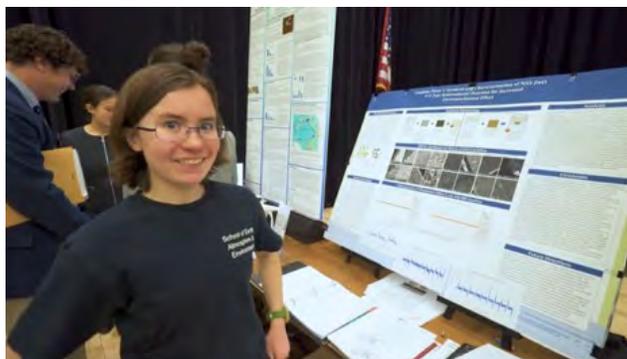
Pebble Pup Wins First Place at the Pikes Peak Regional Science Fair

By Steven Wade Veatch

Jenna Salvat, a member of the Colorado Springs Mineralogical Society and the Pikes Peak Pebble Pups won many awards at the Pikes Peak Regional Science Fair held February 24th at the University of Colorado at Colorado Springs. The Awards Presentation was held on Tuesday, February 27th in the R.F. Celeste Theatre in the Cornerstone Arts Center on the campus of Colorado College. Jenna won the following awards:

- **1st Place Senior Division Physical Science**
- **Grand Award Runner-Up Winner (This means that she almost won the entire fair)**
- **Northrop Grumman Excellence in Science and Engineering Award**
- **2018 Naval Science Award for Senior Division Projects**
- **The UCCS Department of Chemistry and Biochemistry Award**
- **Rocky Mountain AFCEA Chapter 3rd Place Award**
- **American Association of University Women Award**
- **Society for Women Engineers Award**
- **United States Air Force Certificate of Achievement**

Jenna also won first place in Rocks and Minerals at the Science Olympiad competition held earlier this month. Jenna has been a pebble pup since 5th grade. Jenna is in 11th grade at Coronado High School. She plans a career in the geosciences.



2018 Satellite Group Chairpersons

Crystal, Kevin Witte/Bob Germano

Faceting, John Massie/Doreen

Fossil, Jerry Suchan/Joyce Price

Jewelry, Bill Arnson

Lapidary, Sharon, Holte

Pebble Pups, Steven Veatch/
Betty Marchant

2018 CSMS Liaisons

Florissant Fossil Beds
National Monument, Steven Veatch

Western Museum of
Mining & Industry, Steve Veatch

(CONTINUED FROM PAGE 9)

grams: April 19: Amy Titterington: "the Forest Service permitting process". May 17: Dr. John Warm: Tourmalines. June 21: Carl Carnein (Bob): "Twinned Crystals and Twinning: What Are They and Why Collect Them"

- c. Treasurer - Ann Proctor no report
- d. Secretary – Sharon Holte had nothing new to report
- e. Membership Secretary – Adelaide Bahr stated she had taken several membership applications and three new membership applications.
- f. Editor – Larry Jones was absent
- g. Member at Large – John Massie – was absent
- h. Member at Large – Laurann Briding – stated she and John had nothing new to report
- i. Past President – Ernie Hanlon nothing new to report

XIII. Satellite Groups

- a. Crystal Group – Kevin Witte – Frank and Ellie Rosenberg will take over the Crystal Group for March 22. They have two documentaries on DVDs to show.
- b. Faceting Group – John Massie – was absent.
- c. Field Trip (Handouts) – Sharon Holte gave the report for Mike Webb and Ernie Hanlon. Sharon handed out about 10 printouts for the Field Trips and explained the changes: Henderson Mine is canceled. The La Junta Area field trip to the Comanche Grass Lands is canceled. (Ernie and company spent several hours there with no finds). Don Bray reported, after the meeting, that he is in contact with Fred Jackson for the Calumet Iron Mine and the Sedalia Copper Mine. It looks good for both. Sharon may have a contact person and phone number soon for the LaFargeHolcim Cement Quarry.
- d. Fossil Group – Jerry Suchan – Jerry was absent so Joyce gave the program particulars for April
- f. Jewelry Group – Bill Arnson: by appointment only. Had four students this last month.
- g. Lapidary Group – Sharon Holte: by appointment only

XIV. Liaisons

- a. Claims – Frank Rosenberg; no update
- b. Library – Frank & Ellie Rosenberg: Ernie Hanlon made a donation to the club library with a book about Colorado Minerals.
- c. Social Coordinator – Mark Schultz: is moving to Denver but will remain with the club. Lisa will store the two big supply bins.
- d. Store Keeper – Ann Proctor
- e. Constitution, By-Laws and Resolutions – Sharon Holte & Doreen Schmidt: It is completed. Will be sent out to the Board shortly.
- f. Unfinished Business: Microscope – Ernie Hanlon – Board said we would spring for parts. Once they are acquired, we will put

(Continued on page 11)

(CONTINUED FROM PAGE 10)

it up for auction

XIV. Show info: Bob Landgraf needs exhibits to show what the club does in rockhounding... The Pebble Pups are going to enter Several exhibits. Lisa was asked why no additional vendors. She stated we need to keep the number of vendors at about 50.

This allows each vendor to sell enough product to come back next year. Lisa still needs ticket takers, people to move tables and chairs and greeters.

XV. Meeting adjourned by our President at 8:40

Upcoming Field Trip Summaries

By Mike Webb

Book Cliffs, Grand Junction CO

Friday April 27, Saturday April 28, & Sunday April 29, 2018

The Book Cliffs are a desolate, windswept, primitive area stretching nearly 250 miles from Palisade, CO to Helper, Utah. The Book Cliffs are considered the longest continuous escarpment in the world. The area north of Grand Junction offers excellent prospecting opportunities for Barite & Calcite; but success is far from guaranteed. This is a classic Colorado locality for water-clear gem barite found within nodules weathering out of the Cretaceous Mancos Shale. Barite from this area was discovered in the 1940's and most nodules have been thoroughly explored, but fine Barite's are still occasionally found.

The Field Trip will involve a 620 mile journey (Round trip from Colorado Springs to Grand Junction). The drive to Grand Junction takes 5+ hours. You can expect additional mileage and driving times to reach the collecting areas. Accessing the collecting sites will be weather permitting. If it rains or snows, the roads to the sites become impassable to all vehicles. In case of inclement weather the field trip may be canceled. If you plan to attend please provide a reliable contact and check the field trip status (via email) before departing.

Kremmling Cretaceous Ammonite Locality

[On Saturday May 19, Bureau of Land Management Archeologist/Paleontologist Bill Wyatt will lead a field trip to Grand County's extraordinary Fossil Ridge.](#) Also known as the Kremmling Cretaceous Ammonite Locality. The KCAL was declared an Area of Critical Environmental Concern in 1983; containing a dense concentration of fossilized marine creatures that thrived in the Western Interior Seaway about 72 million years ago. "About a hundred different marine species have been found here; Clams, snails, brachiopods, crabs, gastropods and fish, along with four or five types of ammonites" Dr. Emmett Evanoff stated on a recent outing to the locality. The site also contains the incredible nearly three foot wide "bird bath" ammonite molds which are widely distributed on the scenic ridge, north of Kremmling.

[The Field Trip will begin at 10 a.m. Meeting location will be the BLM Kremmling Field Office at 2103 Park Ave, Kremmling, CO.](#) Collecting is strictly forbidden in the Cretaceous Ammonite Area. At a second locality outside of the KCAL we will have an opportunity to collect a limited number of fossils per participant as Bill suggests the importance of leaving specimens for future visitors. Anyone interested in this wonderful opportunity to study & collect alongside BLM Archeologist/Paleontologist Bill Wyatt should contact Mike at mwebbstudent@yahoo.com

**Important Information Regarding The Annual
Pikes Peak Gem, and Mineral, And Jewelry Show**

**Please take some time to read the following, choose an area that interests you,
and volunteer to help make this year's show the best one yet.**

**Colorado Springs Mineralogical Society
Pikes Peak Gem, Mineral, and Jewelry Show
Show Committee and Responsibilities**

Show Chairperson – Lisa Kinder

- Organize and oversee various functions necessary to promote and ensure a successful annual show.
- Monitor progress of all pre-show functions.
- Keep Assistant Show Chairperson apprised of show status.
- Coordinate activities with CSMS Executive Board and obtain their approval.
- Prepare and submit to the Executive Board a preliminary budget to plan and operate the show.
- Set vendor booth prices and determine number of dealer spaces to be sold in order of offset show costs.
- Obtain sponsors for the show.
- Obtain security for the show.
- Engage show venue, sign contract(s), and ensure payment is made or submitted to Treasurer for payments.
- Conduct a post-show critique at which time all committee show persons will present a summary report and recommendation for future shows.
- Submit post show report to Executive Board not later than 45 days after the show.
- Submit profit and loss report to Executive Board not later than 45 days after the show.

Assistant Show Chairperson – Open

- Be familiar with duties of and work with Show Chairperson to coordinate a successful show.
- Be prepared to execute duties of Show Chairperson should she/he become absent or unable to perform their duties.

Treasurer – Club Treasurer

- CSMS Treasurer will also act as the Treasurer for the Annual Show.
- Provide a change fund in small bills to the Admissions Coordinator, each day of the show.
- Pay all bills properly submitted and approved by committee members. (All bills must be submitted to the Treasurer for payment, no later than 15 days after the closing of the show.)
- Obtain all required sales tax licenses.
- Inform each dealer prior to the opening of the show what taxes and percentage for each taxing authority is to be collected.
- Collect all sales taxes at approximately 4:00 PM on the last day of the show and forward them to the proper agency.
- Work with Show Chairperson to prepare a profit and loss statement, not later than 30 days after the show. Following approval by the Executive Board, it will be read to the general membership during the first general assembly meeting thereafter.
- A copy of the profit and loss statement will be furnished to the Club Secretary.

Secretary – Club Secretary

- CSMS Secretary will also act as the Secretary for the Annual Show.
- Keep the Show Chairperson and other committee heads aware of what is contained in incoming correspondence.
- Keep a record of action taken at all show meetings and furnish copies to each member.

(Continued on page 13)

(CONTINUED FROM PAGE 12)

- Minutes of each meeting and a copy of the profit and loss statement will be placed in the CSMS historical records.

Vendor Coordinator – Open

- Select vendors so that a balanced stock of material for lapidary, faceting, jewelry making, fossils, and minerals specimens are available.
- Forward inquiries and contracts to selected vendors to determine their interest in selling materials at the show.
- Contract the number of vendors necessary to meet revenue requirements.
- Ensure that utilities and furnishings are ordered, as requested by vendors.
- Advise vendors of the requirements to collect local sales taxes, with remittances to be made to the CSMS Treasurer, providing vendor does not have local sales tax license/account.

Exhibits Coordinator – (Bob Landgraf?)

- Encourage CSMS members, vendors, and other collectors in the community to enter a display case in any category they choose.
- Contact exhibitors and coordinate exhibit requirements (i.e., loaned show cases, electricity, security, etc.)
- Work with Logistics Coordinator to ensure proper location of exhibits, furnishing requirements (tables, chairs, exhibit cases), and electrical requirements.
- Furnish a detailed listing of exhibitors to the Logistics Coordinator and Show Chairperson no later than one week prior to the show set-up date.

Publicity Coordinator – Lisa Kinder (assistance would be appreciated)

- Design, print, and distribute marketing materials, i.e., banners, cards, posters, etc.
- Ensure that maximum publicity is given to the show through one or more of the following methods:
 - Advertisement in major and community newspapers
 - Radio programs
 - TV/billboard/transit advertising coverage
 - Promotional listings or articles in newspapers, magazines, and online sources.
 - Other methods deemed appropriate.
- Update attendee contact database from door prize slips collected from past shows.
- Contact previous show attendees via mail and/or email at least four to six weeks prior to show.
- Distribute marketing materials to affiliate clubs at least two months prior to the show.
- Contact local hobby related shops/businesses and distribute marketing materials, where permissible, at least two months prior to the show.
- Place signs on outskirts of city and outside of venue, as permissible.

Admissions Coordinator – Open

- Prepare schedules and ensure proper coverage for ticket sales during event.
- Prepare signage stating ticket prices and multi-day discounts.
- Obtain rolls of tickets and carefully record the starting ticket and ending ticket numbers each day, for accurate accounting of daily ticket sales. Tickets of one color shall be used for one day admission and tickets of another color shall be used for two day admission. The days of multiple day admission shall be recorded on the back of the multi-day ticket and initialed by the ticket booth operator.
- Receive change funds from Treasurer. When funds over the change fund accumulate, turn monies over the Treasurer.

Logistics Coordinator – Open

- Work with Vendor and Exhibit Coordinators to develop and implement the floor plan/blueprint for vendors, exhibitors, silent auction, Pebble Pups/Earth Science Scholars, membership recruitment

(Continued on page 14)

(CONTINUED FROM PAGE 13)

and other club affiliated areas.

- Oversee, as necessary, club volunteers to mark vendor booth spaces and exhibit spaces one day prior to show. Coordinate with Vendor Coordinator, Exhibit Coordinator, and venue staff to ensure vendor and exhibitor electrical and furnishing requirements and delivery.

Volunteer Coordinator – John Massie

- Work with the Chairperson, Logistics, Admissions, and Vendor coordinators to determine the number of volunteers needed.
- Recruit club members to volunteer to assist during the show. Volunteers will be needed for:
 - Marking vendor booth spaces.
 - Directing vendors in and out of building during set up and break down.
 - Directing vendors and exhibitors to their proper location on set-up day.
 - Admissions.
 - Greeting and assisting attendees during the show.
 - Security (observation only, a professional security company will be hired to provide security during set up, show days, and break down).
 - Assisting with set up and break down of club related areas.
- Serve as volunteer contact throughout show.
- Direct volunteers to proper post during set up, show days, and break down.

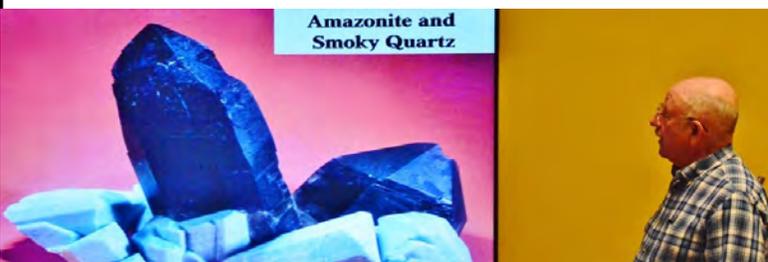
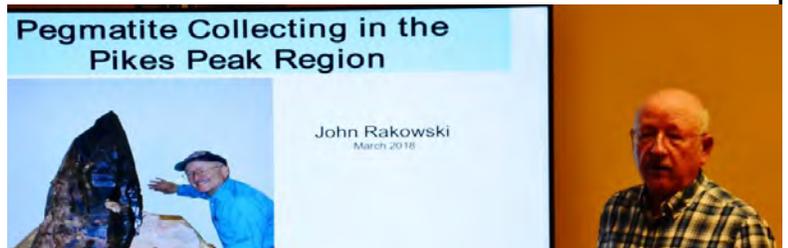
Silent Auction Coordinator – (Ron Yamiolkowski?)

- Obtain and setup microphone system as necessary.
- Place donated items on tables, ensuring bid sheet is provided for each item.
- Close the auction tables at a specified time and collect the successful bid cards and specimens.
- Ensure the identity of the successful bidder before releasing the items.
- Accurately record the sales and surrender the funds to the Treasurer at the end of each show day.

Kids Area Coordinator – Open

- Develop and coordinate children’s age appropriate activities.
- Contact and coordinate, if available, participation of the Gold Prospectors of Colorado to provide a kid - friendly mining activity.
- Engage the assistance of Pebble Pups, as much as possible, in the execution of the activities.

At our 2018 March meeting, geologist and collector, John Rakowski, gave an enjoyable and informative presentation on collecting in the Pikes Peak Region.



All photos courtesy Frank Rosenberg

Hi everyone, our 2018 gem and mineral show is fast approaching. I am soliciting people to exhibit from their collections. We need to create interest from the public in our hobby. The show theme is fluorite, but we encourage exhibits of anything that is related to the earth sciences such as fossils, minerals, meteorites and mining that you would enjoy doing. Please help us put on a great show for 2018!

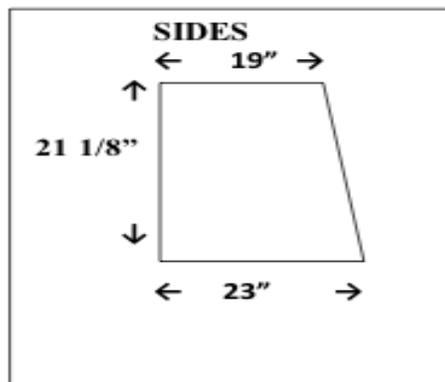
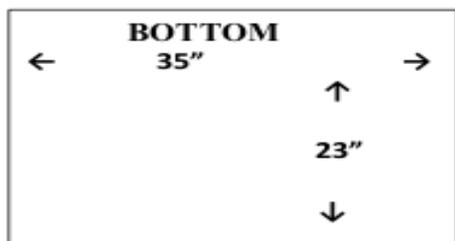
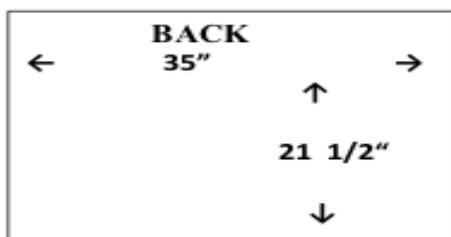
Thanks,

Bob Landgraf

Exhibits chairman

The Colorado Springs Mineralogical Society Case.

All measurements are inside measurements. However, since all cases are handmade there may be some slight variations in the cases. Be sure to bring any necessary tools required to make adjustments to your liners.



**The Colorado Springs Mineralogical Society
 Pike's Peak Gem & Mineral Show
 June 1st, 2nd, and 3rd, 2018
 Norris Penrose Indoor Event Center, 1045 Lower Gold Camp Rd,
 Colorado Springs, CO.**

Request for NON-COMPETITIVE Display Space
Name: _____ Society: _____

--	--

Address:

--

Phone:

Email:

--	--

City:

State:

Zip:

--	--	--

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.

Describe Display or Displays:

--

	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.

Setup is from 12 PM to 7 PM on Thursday May 31 or 9 AM to 10 AM on Friday. Tear down is 4 PM to 9 PM on Sunday.

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 Indoor 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.

Please return by mail or email by:
 May 25th to reserve a case and exhibit space.
 After May 25th exhibitors are still welcome
 based upon availability of cases and space.

RETURN TO: Bob Landgraf
 304 Palmer Trail
 Manitou Springs, CO 80829
 719-685-1364
rbw74@aol.com

Our Staff...

Larry Jones—Editor

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

Share your experiences, your new finds, or simply your experience at our last field trip.

Handwrite it, type it, or email it. Format does not matter. All submissions are welcomed. The DEADLINE for items to be included in the next Pick & Pack, is the **20th 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 should be submitted at resolutions above 200 dpi in TIF, BMP, JPG, or PIC format. Articles are preferred in Word. Editor will correct font.

E-Mail to:

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

T-Shirts, Badges, and Pins

are available for sale.

If you celebrated a CSMS anniversary in 2016 or 2017, you are eligible for your one year pin award

Please see Storekeeper, Ann Proctor

Classifieds

Petrified Wood for Sale

Melany McKnight outside of Calhan has a large pile of Petrified Wood for sale. The prices are \$25 to \$500 for the large pieces and \$50 for a bucket of smaller cabbing sizes.

Call Melany for an appointment. Her contact phone number is 719-659-5860.

Melany lives on Calhan Highway just south of the fair grounds. You can tell her Bill Arnson from the Colorado Springs Gem and Mineral Society gave you this info.



RMGM PROMOTIONS PRESENTS
COLORADO MINERAL & FOSSIL SHOW
APRIL 13-15, 2018
 OPEN 10AM-6PM DAILY; 5PM SUNDAY

LOCATION:
 CROWNE PLAZA DIA
 15500 E 40TH AVE
 DENVER, CO 80239

**FINE MINERALS
 FOSSILS
 GEMSTONES
 JEWELRY
 WHOLESALE
 RETAIL**

**HOURLY GIVEAWAYS
 FREE GOLD PANNING
 FREE KIDS ROCK DIG
 \$5 KIDS DINOSAUR DIG**

**WIRE WRAPPING WORKSHOP
 (SPACE LIMITED, REGISTER ONLINE)**

VISIT US ONLINE!
WWW.COLORADOMINERALANDFOSSILSHOWS.COM

55th Annual
Pikes Peak Gem, Mineral, & Jewelry Show
 Featured Mineral: Fluorite

Fri. & Sat., June 1-2, 2018, 10:00-5:00
 Sun., June 3, 2018, 10:00-4:00

Adults \$5.00 / 3-Day Pass \$8.00
 Kids 12 & Under FREE

NORRIS-PENROSE EVENT CENTER
 (Address & map on reverse side)

Colorado Springs Mineralogical Society www.csms1936.com ppgmjshow@gmail.com

Fluorite on Quartz, Ana Mine, Berbes, Spain
 Photo by Frank Rosenberg, CSMS Member

High Country Land Services, LLC
 Land Surveying & Mining Claim Services

New Claims Staked
 Land Status Research
 Certificate and Map Preparation
 Mapping Existing Claims
 Claim Lines Marked

Jeffrey L Otten, Colo. PLS 33199
 Divide, CO 719-505-3576
jeffotten@highcountrylandservices.com
HighCountryLandServices.com

1014 S 21st Street
 Colorado Springs, CO
 80904

Roots & Rocks
 Hydroponic & Organic Garden Center

www.rootsandrocks.com
info@rootsandrocks.com 719-634-1024



PICK&PACK
P.O. Box 2
COLORADO SPRINGS, CO 80901-0002



CSMS is an incorporated nonprofit organization with these 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 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 p.m.**, at Mt. Carmel Center of Excellence, 530 Communication Circle, Colorado Springs, CO 80905. (Starting (9/21/2017) **Visitors are always welcome.**

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, Jewelry Group, Lapidary Group, Micromounts Group, and Pebble Pups/Juniors. For details on Satellite Group meetings, check out the calendars on page 2 and the web site.

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*, a year of learning and enjoyment, plus a lifetime of memories.

Individuals—\$30, Family—\$40, Juniors—\$15, Corporate—\$100, *****Application is on the web site.

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: www.csms1936.com

CSMS is a Member of the following organizations:

American Federation of Mineralogical Societies (AFMS)

www.amfed.org

Rocky Mountain Federation of Mineralogical Societies (RMFMS)

www.rmfm.org