

THE BULLETIN OF THE COLORADO SPRINGS MINERALOGICAL SOCIETY Published Since 1960

Colorado Springs
Mineralogical Society
Founded in 1936
Lazard Cahn
Honorary President
July 2019
PICK & PACK
Vol 59 Number 6

CSMS General Assembly

Thursday, July 18, 7:00 PM

Speaker: Roger Pittman

Topic: "Mineral Collecting Locations in Colorado"

Please note: Members whose names begin with A-L are responsible for refreshments in July

****In case of inclement weather please call****

Mt. Carmel Veteran's Service Center 719 309-4714

INSIDE THIS ISSUE:

Calendar & Field Trips	Pg 2
2019 Pikes Peak Gem & Mineral Show Pictures	Pg 3 Pg 4
Charter CSMS Members and Phenakite on Mt. Antero	Pg 5
Pebble Pups Corner	Pg 6
Secretary's Spot	Pg10
Brad's Bench Tips	Pg12
<i>Timeless Trees</i>	Pg13
Upcoming Gem&Mineral Shows	Pg11 Pg15

JULY PROGRAM

Roger Pittman, pictured at right, will be speaking at the July general assembly meeting about where to collect mineral specimens in Colorado. There are hundreds, if not thousands of places in this state where collectors of all ages and abilities can acquire mineral samples; some locations are within walking distance of where we hold our monthly meetings (but on private property)!

If you are new to the area and/or the club be sure and attend the program, Thursday, July 18 at 7:00pm - at Mt. Carmel Veteran's Service Center, 530 Communications Cir, Colorado Springs, CO 80905



Photo courtesy of Frank Rosenberg

COLORADO SPRINGS MINERALOGICAL SOCIETY PO BOX 2 COLORADO SPRINGS, COLORADO 80901-0002

CSMS Calendar

July & August 2019

Thu. August 1	-----	Board Meeting	7p.m., Pikes Peak United Methodist Church
Tue. Jul 2, Aug 6	-----	Fossil Group	7p.m., Methodist Church, Jerry Suchan, 303 648-3410
Thu. September 19	----	Pebble Pups, Jrs.	5:30p.m., Mt. Carmel Ctr., Steve Veatch, 719 748-5010
Thu. Jul 18, Sept 19	----	General Assembly	7p.m., Mt. Carmel Center
Thu. September 26	----	Crystal Group	7p.m., Mt Carmel Ctr. Kevin Witte, 719 638-7919
September TBD	----	Faceting Group	Will resume meeting in September, John Massie
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: www.csms1936.com

CSMS Field Trips 2019

July 13, 2019

Topaz Mtn. Gem Mine, Lake George CO
Collectible Minerals - Amazonite, Quartz, Topaz
Leader : Norma & Roger
Contact : normajalexander@gmail.com
Status : **Confirmed**

July 28, 2019

Badger Creek, Hartsel, CO
Collectible Minerals - Peridot
Leader : Robert Berry
Contact : debitcard@msn.com
Status : **Confirmed** - joint trip with RAMS

August 3, 2019

Smoky Hawk Mine, Lake George CO
Collectible Minerals - Amazonite, Quartz, Fluorite
Leader : Matthew Gaunt
Contact : mgadmin@mslteach.com
Status : **Confirmed**

August 10, 2019

Fossil Ridge, Kremmling CO
Collectible Fossils - Ammonite, Clams
Leader : Bill Wyatt BLM Paleontologist
Contact : mwebbstudent@yahoo.com
Status : **Confirmed** - with Summit Historic Society

August 24, 2019

Sedalia Mine, Salida CO
Collectible Minerals : Almandine Garnet, Magnetite
Leader : Mike W
Contact : mwebbstudent@yahoo.com
Status : **Confirmed**

August 25, 2019

Calumet Mine, Salida CO
Collectible Minerals : Epidote, Quartz
Leader : Mike W
Contact : mwebbstudent@yahoo.com
Status : **Confirmed**

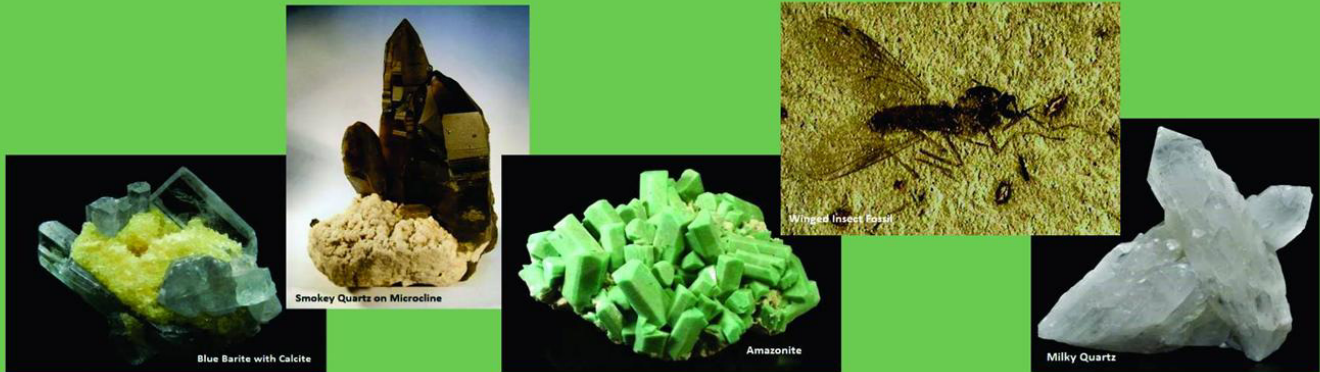
September 21, 2019

CF&I Fluorspar Mine, Wagon Wheel Gap CO
Collectible Minerals - Fluorite, Barite
Leader : Mike W.
Contact : mwebbstudent@yahoo.com
Status : **Confirmed**

We are always in need of volunteers to lead and/or assist with many of these field trips! If you have previously visited any of the "TENTATIVE" marked areas and know your way around the digging areas, please let one of us on the Board know so that we can facilitate that trip! There may be additional and/or new trips added as the summer months get closer - check the upcoming Pick & Pack issues for revisions and updates!

56th Annual Pikes Peak Gem, Mineral, & Jewelry Show

Featuring: Specimens of Colorado



We would like to thank everyone who played a part in the 2019 Pikes Peak Gem, Mineral, and Jewelry Show! As a result of more aggressive advertising, social media outlets, handbills & flyers, word-of-mouth, and excellent overall preparation the club was able to attract 1,947 people to the venue! This record attendance figure is up 23% from last year's count of 1,497 people.

The Silent Auction was able to raise \$2997.15 over the 3-day time period; much appreciation goes to everyone who made it happen! We all look forward to next year's production, and applying what was learned this year to make the 2020 Pikes Peak Gem, Mineral, and Jewelry Show better than ever!

Special thanks goes out to Frank Rosenberg for the outstanding variety of photos that really captured many of the great moments throughout the event! Your talents are much appreciated!





CHARTER CSMS MEMBERS AND PHENAKITE ON MT. ANTERO

Mike Nelson csrockguy@yahoo.com



In recent newsletters I noted that Edwin Over was a Charter Member of the Colorado Springs Mineralogical Society, one of the country's oldest rock and mineral societies dating back to inception in 1936. Mr. Over was a mineral collector of some fame but evidently was not recognizable by many. It seems as Ed preferred to spend his time in the field collecting as a "lone wolf" (Wilson, 2018) while avoiding the lights and glamour of the cities and auctions. His best-known field collaboration was with Art Montgomery, a productive union that lasted from ~1934-1941. One of their collecting localities was on Mt. Antero in Chaffee County, Colorado, in the Sawatch Range near Buena Vista. The Mt. Antero-Mt. White localities, first discovered in the mid-1880s, are perhaps the highest (elevation) gem collecting sites in the U.S. at nearly 14,000 feet and are "most famous" for aquamarine (blue beryl, $\text{Be}_3\text{Al}_2\text{Si}_6\text{O}_{18}$, with a chromophore [coloring agent] of Fe^{++} or ferrous iron). Pearl (1972) noted that Over maintained a camp "near/on" Mt. Antero and collected in summers 1928, 1931, 1932, 1933, 1938, 1951, and 1953; the 1938 expedition was spent with Montgomery. Other than the beryl, the Mt Antero sites have produced beautiful

specimens of smoky and clear quartz, various feldspars, muscovite, monazite, fluorite, bertrandite, phenakite and others. Check out the newsletter of the Colorado Mineral Society for additional information:

<http://www.coloradomineralsociety.org/newsletters/March2014.pdf>



High altitude collecting on Mt. Antero

When I first moved to Colorado and started changing my collecting interests from fossils to minerals, I became intrigued with Mt. Antero and decided that would be my first 14er and perhaps even an aquamarine would show up. I was also sort of fascinated by the mineral phenakite, as in what kind of mineral is that creature, and is it spelled with a "k" or "c" (k is correct). It turns out that CSMS was sponsoring a collecting field trip to the aquamarine sites and so off I went a few days early to secure a camp site, check out the area, and make the trek to the summit ON FOOT. No cheating for me since I wanted the experience of hiking; however, on the day of collecting I was able to drive an ATV to the main sites at ~13,500 feet and wander all over Antero, Mt. White, Carbonate Peak, and a few other high points. I was able to pick up a few small broken crystals of aquamarine, some terminated smoky

(CONTINUED ON PAGE 8)

PEBBLE PUPS CORNER



CSMS Pebble Pups & Earth Science Scholars

The Earth Science Scholars & Pebble Pups meet at the Mt. Carmel Veterans 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>

Rock, mineral and fossil adornments of the Roman Empire

Zachary Sepulveda, Blake Reher, Ben Elick, Jonathan Hair, Joshua Hair, Jack Shimon, Jenna Salvat, Ciena Higginbotham, Jacob Kania and William Wray (USA)

It all started with a son of Mars. Legend has it the city of Rome was founded by Romulus, son of the Roman god of war, who was abandoned as an infant and raised by wolves alongside his brother, Remus. After killing his brother, Romulus founded the city of Rome, which is named after him, and became its first king.

But wasn't Rome an empire? Well, before it was an empire – or even a republic – the city of Rome was ruled by kings for hundreds of years. Historians estimate that around 509 BCE, this system of monarchy ended and a republic was formed after a popular revolt, in which in the common people rebelled and formed a 'republic', which literally means 'property of the people'.

Once the great republic had been formed, Rome expanded from a city state to a true power. Rome conquered all of Italy and Sicily, and defeated the Carthaginians of Tunisia in the Punic Wars. The republic went on to conquer

Southern Spain and defeat Macedonia, turning the once great empire of Phillip V into a Roman province. However, like many governments throughout history and modern times, the republican system of government in Rome fell into corruption and disarray. The gap between the rich patricians and poor plebeians became significantly more pronounced and the wealthy oppressed the poor. Leaders who attempted to fix these problems were promptly assassinated. In 59 BCE, a general known to us as Julius Caesar returned to Rome from conquering Gaul (modern day France) and after a bloody civil war, declared himself dictator. Less than a year later, Caesar was murdered by his friends and colleagues. This event caused another power struggle, which ended with Augustus taking over as the first Roman emperor.

The Roman Empire went on to conquer virtually all of the lands surrounding the Mediterranean and most of Europe. It stretched from

Egypt to the borders of Scotland and was the biggest empire to ever exist in Europe - no other nation since has occupied and held so much of the continent. For much of its history, Rome had a solid, functioning economy and an extremely formidable military. The empire was and still is renowned for its amazing art and architectural achievements. In 325 CE, Rome adopted Christianity as its state religion and, shortly afterwards, began its decline. After hundreds of years of success, the empire became so fragmented that it split in two. While the eastern part of the empire went on to become the Byzantine Empire, the west imploded due to corruption, war and a lack of communication. With that, a great empire fell and a chapter in history closed.

However, the history, economics and geography of the Roman Empire allowed the movement of geological resources, including through trade, between different regions and over large distances. Indeed, during the height of Rome's power, it was noted for its wealth and industry, and this translated into a prestigious trade in jewellery and adornments of all kinds. Usually, skilled artisans were responsible for the crafting of these pieces of wearable art.

Most Roman jewellery used gold as a basic material, which was then embellished by jewels, such as pearls, emeralds and turquoise. Because the Romans used gold as the cornerstone of their jewellery, they needed a lot of it. Since central Italy is rather lacking in mineral resources, they sourced the bulk of their gold from provinces to the west, such as Iberia (Spain) and Gaul (France). They also received gold through trade with Africa and India. The basic techniques of jewel-crafting in Roman society, such as filigree (the practice of twisting tiny pieces of gold wire together to form patterns) and granulation (the practice of moulding tiny grains of gold onto a larger smooth piece) are still in use today. The goods produced were sold in markets and community gathering places referred to as forums. However, trade in such goods was not explicitly through markets, because, often the ruling classes would commission special pieces from the best jewellers.



Fig. 1. An example of Roman art style. Original watercolour © Ciena Higginbotham.

(CONTINUED ON PAGE 7)

Since the dawn of time man has adorned himself with materials of rocks, minerals, fossils and gems. The Romans were no different and show remarkable craftsmanship.

About the authors

Zachary Sepulveda, Blake Reher, Ben Elick, Jonathan Hair, Joshua Hair, Jack Shimon and Jenna Salvat are all member of the Colorado Springs Mineralogical Society, whereas Ciena Higginbotham, Jacob Kania and William Wray are members of the Lake George Gem and Mineral Club.

References

Ancient Roman Jewelry. (2008). Retrieved May 19, 2015, from <http://www.explore-italian-culture.com/ancient-roman-jewelry.html>.
Milani, M. (2011). Shopping in Ancient Rome. Retrieved May 19, 2015, from http://www.mariamilani.com/ancient_rome/ancient_rome_shopping.htm.
Roman Jewelry. (2013). Retrieved May 19, 2015, from <http://www.tribunesandtriumphs.org/roman-clothing/roman-jewelry.htm>.
Roman Metallurgy. (2015). Retrieved May 19, 2015, from http://en.wikipedia.org/wiki/Roman_metallurgy.



Fig. 1a. Roman amethyst bead from about 100 BC. Image © SW Veatch.

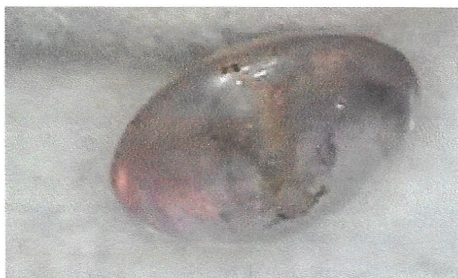


Fig. 1b. This bead is made of amethyst, which is a variety of quartz. Amethyst was valued among the Romans, along with emerald and pearls, for bead making and jewellery. Amethyst was made into crude beads for necklaces, earrings and bracelets. Image © SW Veatch.



Fig. 2. This is a cylindrical bead made of granite from about 100 BC. These were traded throughout the Roman empire. Image © SW Veatch.

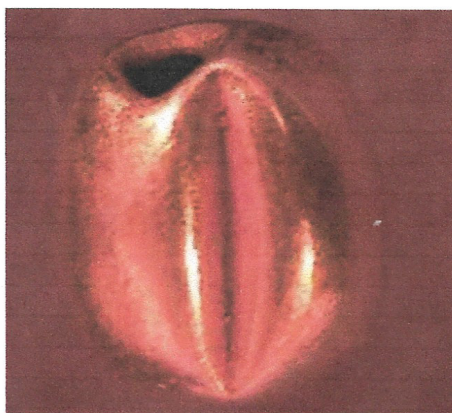


Fig. 3. This bead is made of solid gold and has had intricate work done on it. It would have been part of a necklace worn by a wealthy man or woman. Image © SW Veatch.



Fig. 4. This carved piece of Lapis Lazuli reveals specks of pyrite. The gemstone was highly prized for its blue colour, and was mined in Afghanistan and then brought to Rome. Image © William Wray.



Fig. 5. This unusual ornament was fashioned from a fossil sea urchin. It was worn as a pendant by a slave or a Roman citizen of the lower-class. Image © Blake Reher.



Fig. 6. This unusual piece of abalone shell came from a mollusc and it was ground down to a size that would fit on a necklace. This adornment was perhaps worn by a slave. Image © SW Veatch.

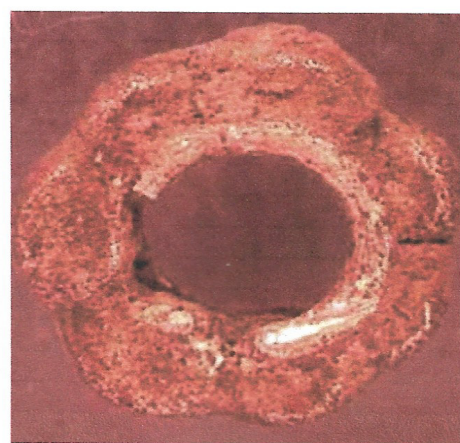


Fig. 7. This piece, made of silver, was worn by a Roman over 1,200 years ago. The Romans prized their silver mines. Image © SW Veatch.

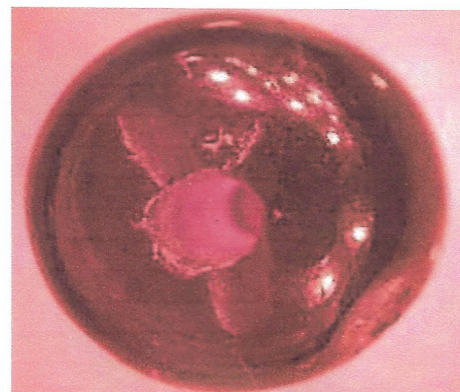


Fig. 8. This garnet ornament was fashioned into a bead that could be strung onto an elegant necklace worn by a Roman citizen. The fiery-red pigmented garnet is most likely of the pyrope variety. The small hole could have been created using a manual drill press, a primitive instrument comprising a wooden rod tipped with a mineral slab that is comparatively more durable than the material that is being bored into. The garnet was rounded into this spherical shape using a polishing stick or polishing mound, both methods involving the use of tougher mineral material to abrade the exterior of the garnet. Image © SW Veatch.



Fig. 9. Carnelian is a type of quartz that is reddish orange in colour. The Romans cut and polished it to make jewellery, but, more interestingly, they engraved gems for signet or seal rings. These carved gems were pressed into hot wax to seal important documents and letters. Image © Jack Shimon.

(CONTINUED FROM PAGE 5) quartz crystals, and a few non-colored beryl crystals. On a subsequent trip I located a couple of terminated quartz crystals with a few, much smaller, gemmy, crystals attached to the quartz. Without magnification I simply wrote off these smaller crystals as quartz (phenakite comes from the Greek phenakos meaning deceiver since it “looks like quartz” :), or maybe even clear topaz. Upon returning home and taking a closer look under a scope, and browsing photos in MinDat, I guessed/identified phenakite as the mystery mineral. Now, as an old softrocker and paleo person from the plains, I didn’t have the slightest idea what phenakite was or is. This was early in my career as a mineral collector and we certainly did not have phenakite in Kansas! Probably not even in the Mineralogy class collection drawers!

Phenakite is a beryllium silicate [Be_2SiO_4] that is present in the beryllium-rich granite pegmatite emplaced on Mt. Antero. Other beryllium minerals at Mt. Antero include euclase and bertrandite (beryllium silicate hydroxides).



Hunting for the elusive aquamarine on Mt. Antero.



Phenakite crystal attached to quartz. Width of crystal ~3 mm.

It is difficult to describe phenakite other than saying keep a sharp eye if prospecting in a beryllium-rich pegmatite or high temperature metamorphic rocks. Most crystals are small but some range up to several inches in length (rare). One very confusing identification facet is their habit (Trigonal Crystal System), ranging from prismatic (long) to tabular to modified and/or flattened rhombohedrons. Crystals are often clear and gemmy; however, they may take on a white to pale yellow color. The gemmy crystals are transparent while white crystals are more translucent. They have a vitreous or shiny luster and are quite hard at nearly 8.0 (Mohs). Specimens are quite brittle and break with a conchoidal fracture. The crystals from Mount Antero are generally small and attached to quartz crystals and seem to be modified rhombohedrons. However, individual and unattached crystals are found by the dedicated aquamarine hunters and if large enough are faceted and bring a healthy price as gemstones. At other localities phenakite is massive or granular-and really tough to identify. **(CONTINUED ON PAGE 9)**



Phenakite crystal (cube-like) attached to quartz.

Width of crystal ~2 mm.

As noted several times, I am far from a mineralogist and have my difficulties with crystallography, some identifications, and descriptions. If you really want to learn about phenakite check out my colleague Bob Carnein's article in the September 2015 issue of the Lake George Gem and Mineral Club. It will make you weep with joy—if you are interested in phenakite!



Unattached phenakite crystal. Width ~8mm

The real reason that I decided to write this little blurb is the historical significance of one specimen I purchased at an estate sale. Traveling back to 1936 and the formation of CSMS I find that three of the Charter Members were Lazard Cahn, Edwin Over, and Willard Wulff. The phenakite crystal I have is a micromount owned by Lazard Cahn (d. 1940) and then traded/sold to Willard Wulff. I can only dream that Cahn acquired the specimen from Ed Over, then passed it on to Wulff, then to his daughter, and it now resides in my small collection. Now that would be a story!



Go out and chase your dreams no matter how crazy it looks.

Shanice Williams



Prismatic terminated phenakite crystal, length ~4 mm, embedded on crystals of colorless fluorite. Mass attached to quartz not shown on photo. The Cahn-Wulff specimen.

REFERENCES CITED

Pearl, R. M., 1972, Colorado Gem Trails and Mineral Guide: Swallow Press, Ohio University Press, Athens.

Wilson, Wendell E., 2018, Mineralogical Record Biographical archive:

www.mineralogicalrecord.com

2019 CSMS OFFICERS

Sharon Holte, President

John Massie, Vice-President

Open, Secretary

Ann Proctor, Treasurer

Adelaide Bahr, Membership Secretary

Taylor Harper, Editor

Laurann Briding, Member-at-Large

Bill Arnson, Member-at-Large

Ernie Hanlon, Past President

2019 CSMS CHAIRPERSONS

John Massie, Program Coordinator

John Massie, Show Volunteer Coordinator

Mike Webb, Field Trip Coordinator

Steven Veatch, Science Fair Chair

Frank & Ellie Rosenberg, Librarians

Mark Schultz, Social Committee Chair

Ann Proctor, Store Keeper

Lisa Kinder, Show Chairman

Lisa Kinder, Webmaster

Lisa Kinder, Facebook Keeper

Mike Nelson, Federation Representative

TBD, Federation Representative

SECRETARY'S SPOT

by Sharon Holte

General Meeting Minutes for the
Colorado Springs Mineralogical
Society - 6/20/19

CSMS General Assembly Meeting

The General Assembly meeting was held at the Mt. Carmel Veterans Service Center at 530 Communications Circle, Colorado Springs, CO 80905 on Thursday, June 20, 2019; at 7:00 p.m.

The meeting was called to order by our President, Sharon Holte, at 7:00 p.m. followed by the Pledge of Allegiance. Sharon left her brief case at home so winged it.

New members were introduced by Adelaide Behr, our Membership Secretary. Several guests were introduced.

John Massie introduced Amber Sanderson, the guest speaker. She was presenting "Staking Unpatented Mining Claims on Federal Land". She oversees the Mining Law and Mineral Materials Program at the Royal Gorge office of the BLM since 2017. Her program was very interesting and too long for our time slot. She could have used twice as much time because her topic was very interesting, there were many detailed questions, and there is a lot to know about how, when, and where various forms must be filed.

Sharon called for a break to consume the drinks and goodies brought by the membership. Five minerals were handed out during the break. No new specimens were donated.

Officer Reports: Sharon Holte, President. The Calendar of Deadlines is caught up until September. We need to have a post meeting for the show. John Massie, Vice President firmed up the picnic for August 24 and the Western Museum of Mining and Industry. No other officer reports.

Lisa Kinder, Show chairman, had a few very good words for the show. She and Ann are still working on the overall figures for the show. Frank and his team did a fabulous job at the Silent Auction. This was the best year ever! Thanks Frank and team!!!

The following are speakers for the next several months: July 18, Roger Pittman / Mineral Collecting Locations in Colorado; August _no meeting / no speaker – picnic at WMMI; September 19, Bob Hickey / unknown; October 17, Ben Elick / History of CSMS Pebble Pups; and November 21, Tracie Cardwell / unknown.

Satellite Groups reports: Crystal Group – Kevin Witte, next meeting is September 26 and will be a show and tell; Faceting Group – John Massie, meeting as usual; Pebble Pups – Steven Veatch, new meeting is September 19; Fossil Group – Jerry Suchan, meeting as usual; Jewelry Group – Bill Arnson, by appointment only, call him or email him; Lapidary Group – Sharon Holte, By appointment only please call Sunday evening after 6:30 p.m.

There was no unfinished business. Also, there was no new business.

Meeting Adjourned by our President, Sharon Holte at 8: 30 p.m.

2019 SATELLITE GROUP CHAIRPERSONS

Crystal, Kevin Witte/Bob Germano

Faceting, John Massie/Doreen Schmidt

Fossil, Jerry Suchan/Joyce Price

Jewelry, Bill Arnson

Lapidary, Sharon Holte

Pebble Pups, Steven Veatch/
Betty Marchant

2019 CSMS LIAISONS

Florissant Fossil Beds
National Monument, Steven Veatch

Western Museum of
Mining & Industry, Steven Veatch



th

Annual
4 | **C** orners

Gem & Mineral Show

July 12 - 14, 2019

La Plata County Fairgrounds
Durango, CO

60+ Vendors · Kids' Activities · Educational Programs · \$2 Admission
Friday and Saturday 10am - 6pm, Sunday 10am - 5pm
MORE INFO: durangorocks.org

Ammonite photo by Michelle Fisher

The Original
DENVER
GEM & MINERAL SHOW
Sept 13-15
2019
DENVER
MART

Fossils
WORKSHOPS
Mr. Bones
FLUORESCENCE
DEALERS
GOLD PANNING
MINERALS
Exhibits
MINERAL ID
SPEAKERS



Canada
UNEARTHED

For tickets and information visit denvershow.org

The Greater Denver Area Gem & Mineral Council is a non-profit 501(c)(3) corporation organized exclusively for charitable, educational, and scientific purposes.

Colorado Mineral & Fossil Show

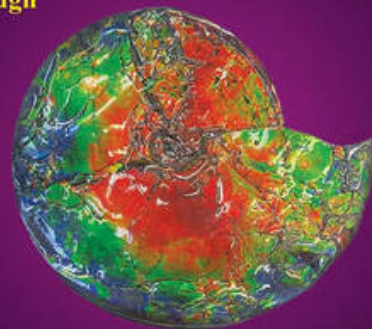
September 6 - 14, 2019

Crowne Plaza DIA, 15500 E. 40th Ave., Denver, CO 80239
(Northeast corner of I-70 and Chambers Rd.)

Hours Monday - Saturday Wholesale 9AM-6PM - Retail 10 AM-6PM
Sunday 10AM-6PM
Closing Day Saturday September 14, 2019 10AM-4PM

Minerals, Fossils, Meteorites, Tektites
Carvings, Cutting Rough
Cabochons, Gems
Jewelry & More
Mineral Drawings
Guest Speakers
Free Admission
175 Quality Retail & Wholesale Dealers

\$100 SHOW DEALER
VOUCHER GIVEAWAYS
EVERY HOUR ON
OPENING DAY
10:00AM - 4:00PM
YOU NEED TO BE PRESENT
TO WIN



Platoniceras costatum
Alberta, Canada
Photo courtesy of
Korite International and
Canada Fossils



www.rmgm-promotions.com

Brad's Bench Tips

NEW MELTING DISH

A new melting dish or crucible must be given a protective coating of borax before its first use. Borax extends the life of the ceramic material. Once done, it generally does not have to be repeated.



The procedure is straightforward. Heat the new melting dish to red with a large torch. You'll need plenty of heat. I use an acetylene/air Prest-O-Lite torch with a large #5 nozzle.



When the dish is hot, sprinkle in a half teaspoon of borax, let it melt, and spread it with a carbon rod over all of the interior surface of the dish. Add more borax if needed.



Sometimes you will have to hold the dish at an angle to coat the sides up to the rim. And don't forget to coat the pouring spout itself.



RING SIZE VARIATIONS

The numerical sizes marked on ring gauges and ring mandrels are often not the same across different manufacturers. If you're using a ring gauge to measure a customer, be sure to compare the markings on the gauge with the markings on the mandrel you use to make the ring. They may not be the same.



Also, you may have to adjust a little for the width of the ring shank. If you're making a wide shank ring, the ring generally has to be a little bit larger in diameter than the ring gauge size in order to get a comfortable fit.

Work Smarter & Be More Productive With Brad's "How To" Jewelry Books [Amazon.com/author/bradfordsmith](https://www.amazon.com/author/bradfordsmith)

Timeless Trees at Florissant, Colorado

By Steven Wade Veatch

The huge petrified Sequoia stumps near Florissant stretch the limits of my understanding. I'm left with only wonder, like a poem I can't explain. Under the dominion of a clear blue sky, the afternoon light ricochets off the stone, displaying the myriad beige and brown hues of the fossil stumps. Their stony surfaces contrast with tufts of grass that surround them. The nearby orange-red bark of ponderosa pine and the scent of the forest adds another layer of magic, while silent mats of pine green moss cluster in the shadows. Pale lichens cover some of the stone tree rings. The warm summer air buzzes with insects.

For me, the stone trees are a portal where the past joins with the present, and time seems to have stopped. I imagine how it all began 34 million years ago when a cluster of nearby volcanoes, once dormant, erupted. It started with a blast of ash and fiery molten rock shooting out from awakened vents. The air became heavy and dark, as plumes of grey ash hazed eastward towards



Figure 1. View of the Florissant Fossil Beds National Monument's iconic "Big Stump." Photo by S.W. Veatch.

what would become Florissant. Rain-fall mixed with loose sediments on volcanic slopes, forming mud—the color of morning coffee—that rushed down the slopes of the volcanoes at speeds of up to 90 miles an hour. Ash rained out of the sky and mixed with the spreading mud. The mud popped and hissed, while it spilled over ledges, covered rocks, and stretched heedlessly into the Florissant valley.

A wreckage of plants and animals tumbled in the mud's advance as it invaded the forest of tall Sequoias. It turned the area into a surreal, harsh, hellish place, wiping out local populations of oreodonts, rhino-like bron-totheres, and small horses. Birds,

struggling to dodge the devastation, flew skyward from the branches of trees that stood above the mud. Tendrils of steam rose out of the jumbled mess of mud that surrounded the bases of the trees. The weight of the mud pressurized and squeezed the wood. Over time, silica in the mud penetrated the wood, leaving behind the remnants of the ancient forest we encounter today.

(CONTINUED ON PAGE 14)

I first saw the petrified trees when I was in grade school. I came back often with my family to look at them again. This relic stone forest changed me. I studied fossils and rocks because of them. And I learned from them. I now realize how mankind is a force of nature and how we can alter landscapes, just as the ancient mud and ash did so long ago at Florissant. Our addiction to fossil fuel has altered our planet's atmosphere and contributes to changing global climate. Florissant's Sequoias are extinct because of climate change, and these trees encourage us to contemplate our annihilation as the planet experiences rates of extinction not experienced since a meteor wiped out the dinosaurs.


At the stone stumps, I take a few minutes to listen, where the sounds of the chirping birds, chattering squirrels, and the soft whispers of breezes exist with the noises of development—homes being built, cars moving and dogs yapping. I can also hear the petrified forest—it speaks of an Earth that is always in a state of change, but this protected ancient forest (a national monument now) also provides a place where change slows down, at least for me. As I look at the fossilized trees, I sense a calm as they release me from my ego and create an awareness of the wonderful things I can discover outside of myself. 



Figure 2. Dynamite was used the early twentieth century to expose this stump. The use of explosives resulted in the shattered texture of the stump and required the use metal bands to hold it together. Photo by S.W. Veatch.

Our Staff...

Taylor Harper—Editor

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 welcomed.

The DEADLINE for items to be included in the next Pick & Pack is the **20th of the preceeding-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.

Articles are preferred in MS Publisher, but the 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 2017 or 2018, you are eligible for your one year pin award!

Please see Storekeeper,

Ann Proctor

Classifieds & Announcements

WANTED
Rock Hounds
Creede Rock & Mineral Show



August 2, 3 & 4, 2019

10 a.m. to 5 p.m.

FREE ADMISSION

Mineral Specimens, Fossils, Nuggets, Geodes,
 Silver Ore, Opals, Turquoise, Jewelry,
 Beads, Meteorites, and more...

Geology Programs - Fri. & Sat. Evenings - 7 p.m.
UNDERGROUND MINING MUSEUM • CREEDE, CO

www.creederocks.com

Sponsored by Rare Things Gallery & Creede Visitor Center/Chamber of Commerce • 719-658-2374



THURSDAY-SUNDAY, AUGUST 8-11, 9:00am-6:00pm each day!



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

Postage Here



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, 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

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.rmfmts.org