

CSMS General Assembly Thursday, June 18 2020, 7:00 PM Mt. Carmel Veterans Center <u>CANCELED</u>

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

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

Colorado Springs Mineralogical Society

Founded in 1936 Lazard Cahn Honorary President June 2020 "Pick & Pack" Vol 60 Number 5

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

Upcoming CSMS Events

ALL CSMS activities are CANCELED until further notice

General Assembly Meeting CANCELED	June '20
Pebble Pup Meeting CANCELED	June '20
Crystal Club Meeting CANCELED	June'20
Board Meeting CANCELED	June'20
Fossil Club Meeting CANCELED	June'20
Faceting Club Meeting CANCELED	June'20

CSMS Calendar

Jun '20	Jul '20						
06/02/20	07/07/20	Fossil Group	1st Tues	7:00 PM	Pikes Peak United Methodist Church	Jerry Suchan	303-648-3410
06/04/20	07/02/20	Board Meeting	1st Thur	7:00 PM	Pikes Peak United Methodist Church	John Massie	719-338-4276
06/18/20	07/16/20	See session online	3rd Thur	5:30 PM	Mt. Carmel Center	Steve Veatch	719-213-1475
06/18/20	07/16/20	General Assy Meeting	3rd Thur	7:00 PM	Mt. Carmel Center	John Massie	719-338-4276
06/25/20	07/23/20	Crystal Group	4th Thur	7:00 PM	Mt. Carmel Center	Kevin Witte	719-638-7919
06/25/20	07/23/20	Faceting Group	4th Thur	7:00 PM	Berta's House	John Massie	719-338-4276
by appt	by appt	Lapidary Group	by appt	by appt	Sharon's House	Sharon Holte	719-217-5683

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

Upcoming Community Events (Submitted by Pete Modreski)

SUSPENDED Van Tuyl Lecture Series, Colorado School of Mines, Iron Ores in North America – Past Importance, Future Promise, by Dr. Phil Brown, Univ. of Wisconsin. Berthoud Hall Room 241, CSM cam-pus, Golden. All are welcome. See https://geology.mines.edu/eventscalendar/lectures/ for the upcoming schedule. [Note:] *Lecture series suspended until further notice*

CANCELED Colorado Mineral and Fossil Spring Show, Crown Plaza Hotel - Convention Center, 15500 E 40th Ave., Denver, Colorado, 10-6 Fri. & Sat., 10-5 Sun., free parking & admission. [Note:] previously scheduled Apr 10-12 then May 15-17—now *canceled outright*.

RESCHEDULED for Sept 2020: Rise of the Mammals: Exceptional Continental Record of Biotic Recovery after the Cretaceous–Paleogene Mass Extinction (about the Corral Bluffs fossil mammal discoveries), by Ian Miller and Tyler Lyson, Denver Museum of Nature and Science; at the CSS Annual Past Presidents' Dinner, to be held at the Mount Vernon Canyon Club. Social time at 5:30, dinner at 6:00, program at 7:00. Reservations required for dinner but guests are welcome to attend for the program only starting at 7:00 PM. Visit https://coloscisoc.org/ for further details.

CANCELLED Sat, May 16, noon-4 PM: Silent (+ Vocal) Auction, sponsored by Colorado Chapter, Friends of Mineralogy. All are welcome; setup at 11, auction begins at noon. At a new location: Wheat Ridge United Methodist Church, 7530 W. 38th Ave., Wheat Ridge (38th Ave. at Wadsworth Blvd.).

POSTPONED Symposium on Water and Energy in Colorado, to be held in Ricketson Auditorium, Denver Museum of Nature and Science. Cosponsored by the Colorado Scientific Society, Denver Museum of Nature & Science, Center for the American West, and others. Details forthcoming. [Note:] was scheduled for Sat, May 16, 2020, now postponed until TBD date.

UNKNOWN Sun, May 17, noon (ish): for the monthly FSS (Florissant Scientific Society) meeting, Christine Siddoway (Colorado College) will give a talk on the Tava Sandstone (the geologically famous "sandstone injectite dikes of the Pikes Peak region") followed by a short field trip. Osborne Center, University of Colorado at Colorado Springs. All are welcome to attend; contact Beth Simmons, cloverknoll@comcast.net, for details or to be put on the FSS mailing list.

CANCELED Fri-Sat-Sun, June 12-14: Pikes Peak Gem & Mineral Show, Norris-Penrose Event Center, 1045 Lower Gold Camp Road, Colorado Springs, CO 80905. Sponsored by the Colorado Springs Mineralogical Society. Hours: noon-7 pm Fri., 10-5 Sat, 10-4 Sun. Adult (12 and older) admission \$5, multiple day \$8, children 11 and under, free.

Thurs.-Sun., July 23-26: Fairplay Contin-Tail Gem, Mineral, and Jewelry Show, Fairplay River Park. *Still on at this time.*

Adult CSMS Rock Hound of the Year

CSMS is in the process of selecting an Adult Rock Hound of the Year. Since there is no deadline, this will be handled at the (TBD) general assembly meeting.

- End of Event Section -

Tucson 2020: What Did I Pick Up? Mike Nelson

Instead of worrying about what you can control, shift your energy to what you can create.

- Roy T. Bennett



We have come to Day xx of self quarantine, and what day of the month is it? Just like the movie Groundhog Day! In this time of in-home sheltering, and thinking that my age puts me in the at-risk group, I certainly have given

thought to "my life." Part of this remembering is probably a normal process when one ages and starts to think about their mortality; however, the COVID-19 pandemic sort of exacerbates the situation and moves it onto the front burner. So far, I have made it OK, and hope for a well future.

I also have reshaped my time to re-stack and "clean" my office, re-file the books and magazines, and sort the minerals. This has been a pleasant sort of exercise and has brought back many fond memories, especially of my recent visit to Tucson 2020. The February event is an assemblage of ~51 different show venues with the culminating Tucson Gem and Mineral Show®, the *main show*, running February 13-16 at the Convention Center downtown. Smaller shows "officially" started Saturday January 31 although my dealer friends tell me that high end trading and buying in hotel rooms started much earlier. In fact, some collectors of fine minerals had left town by February 1. However, I was just an ole rockhound from Colorado Springs and happy to be there in the sunshine talking to the friendly, often mom and pop, dealers, and frugally buying a few goodies that lit up my eyes. Life was good.



The" granddaddy" of the Tucson venues is the Tucson Gem and Mineral Show® (TGMS) that finishes off a spectacular two weeks plus of smaller ancillary shows. I usually attend the opening day (February 13th this year) and the crowd was large (perhaps average?) and the displays were spectacular. The Show, as do most club shows, features both guest display/ competitive cases of minerals, and booths occupied by several hundred dealers (~250). A big difference between TGMS, and a local show, is that high-end dealers from around the word bring their finest specimens to Tucson. These often are minerals that the general public may never have the chance to observe again. The prices for these museum-quality specimens range into the tens and hundreds of thousands of dollars and are usually marked POR (price on request). For me, and perhaps most attendees, just ogling at one-of-a-kind mineral specimens was well worth the trip.

I try to attend as many shows as possible before the TGMS since I really enjoy the atmosphere associated with small-time dealers and their willingness to talk about collecting and their trips. My first stop this year was not planned but was just a small motel room I noted wandering through. Their flats of minerals were sparse but the two young men selling were very nice and this was their first show as a vendor. They had come from North Carolina and had spent the previous month stopping at localities collecting this and that while getting ready for shows this spring and summer along the east coast. They decided to sell at the Old Pueblo Show since the space was abandoned by a previous seller and they received a "good deal" on the lease. I was their first customer and they showed me a flat of wulfenite collected from the La Morita Mine. Ascención Municipality, Chihuahua, Mexico.



Fig. 1: A really nice cluster of wulfenite crystals on a barite matrix with several "balls" of microscopic crystals of mimetite perched on the wulfenite in the upper left quadrant. Width FOV ~2.1 cm. *Photo: M. Nelson*

I am pretty much a sucker for wulfenite, a colorful lead molybdate [PbMoO₄] appearing as thin tabular crystals. The theme of the 2019 Tucson Show was wulfenite and last year I offered articles on the mineral---no need to repeat info here. The specimen from La Morita also has some nice yellow botryoidal crystal masses of the lead chloroarsenate, mimetite [Pb₅(AsO₄)₃Cl]. According to MinDat, the small polymetallic (mostly lead, zinc, and silver) La Morita Mine started producing these lustrous wulfenite-mimetite crystals (both secondary minerals) in 2018 and 2019.

Speaking of mimetite, campylite is a variety of mimetite where the distorted crystals have a barrel-shaped bend (they are very distinct).



Fig. 2: Campylite crystals. Width FOV ~1.8 cm. *Photo: M. Nelson*

This variety of mimetite is rather rare and the best-known specimens come from the Dry Gill Mine, Caldbeck, Allerdale, Cumbria, England, UK. From what I read the burnt-orange colored campylite crystals from Dry Gill are one of the "Classic Minerals of England...and one of the most famous mineral localities in world" (Cooper and Stanley, 1991). Little did I know this as I shelled out three bucks for the specimen—not bad for a "classic."



Fig. 3: Campylite crystals. Width FOV ~1.8 cm. *Photo: M. Nelson*

Cooper and Stanley (1991) further described the Mine as of little commercial interest with few minerals in the vein, and only a few hundred tons of colored lead ore had been removed before operations ceased in 1860. Mineral specimens are increasingly hard to find with a few being obtained in the 1970s. Campylite, [Pb₅(AsO₄)₃Cl] is a secondary mineral found in the oxidized zones of lead deposits, such as galena that is present at Dry Gill. In addition, Cooper and Stanley (1991) noted that campylite is a "phosphatian mimetite." Since mimetite, lead arsenate, is in solid solution with the lead phosphate, pyromorphite, I presume that phosphatian campylite is on that line leading to pyromorphite.

Many rockhounds have a nice, bright red, crystal of cinnabar, a mercury sulfide [HgS], in their collection (see Pick & Pack April 2016), with many coming from recently opened localities in China. Cinnabar crystals are impressive if for nothing else than the brilliant color. Other collectors shy away from cinnabar as they fear absorbing mercury into their body. However, MinDat notes that mercury sulfide is relatively insoluble and generally safe to handle. However, do not inhale dust associated with the crystals and always wash hands after handling the specimens (that warning goes with essentially all minerals).



Fig. 4: Thin, earthy, yellow, crusts of schuetteite surrounding tarnished cinnabar on an opalized matrix of rhyolite (or some other volcanic rock). Photomicrograph width ~ 1.3 cm. *Photo: M. Nelson*

Schuetteite is an interesting mineral that is often found with cinnabar and chalcedony in old mercury mining districts in the arid deserts and ranges of the western United States. In the original description of schuetteite (Baily and others, 1959) noted that it was a common secondary alteration product found on: 1) dumps at old mercury mines; and 2) bricks from furnaces that refined mercury ore. In natural occurrences, schuetteite, a Mercury Sulfate [Hg₃O₂(SO₄)] formed by direct oxidation of Cinnabar by oxygen-bearing surface water with sunlight providing the energy.



Fig. 5: Thin, earthy, yellow, crusts of schuetteite surrounding tarnished cinnabar on an opalized matrix of rhyolite (or some other volcanic rock). Photomicrograph width ~ 1.6 cm. *Photo: M. Nelson*

Schuetteite is identified by its yellow to yelloworange color, its occurrence as very thin encrustations on cinnabar, a measured hardness of ~3 (Mohs), and if need be, an xray comparison with synthetic schuetteite. It can be confused with other mercury alteration products such as kleinite, a mercury oxychloride (see Pick & Pack December 2019). However, kleinite and the others contain chlorine that causes the yellow mineral to darken in sunlight. Schuetteite does not contain chlorine and therefore retains the original yellow color.

My particular specimen, obtained in Tucson, was collected from dumps of the Silver Cloud Mine, Ivanhoe District, located near Midas, Nevada, north of Battle Mountain. It was one of numerous small mines operating in the area (1940-1944) and production was minor.

A long time ago, at least in my way of counting

I wrote, as part of three articles on nickel, on a really interesting nickel sulfide [NiS] called millerite (see Pick & Pack October 2014). Now millerite is not a rare mineral; however, the collecting localities I described were from Paleozoic carbonates in the Midcontinent Region of the U.S., essentially from Michigan through Kentucky. And, the millerite crystals were found encased in concretions/geodes (such as the famous Keokuk Geodes).



Fig. 6: Radiating millerite crystals on crystalline calcite. Collected "near Iowa City, Iowa." Length of "whiskers" ~4 mm. *Photo: M. Nelson*

Millerite is a fascinating mineral, at least to an old paleontologist like me. The crystals are clusters, or individuals, of shiny metallic acicular crystals that are pale brass-yellow when fresh but tarnish to an iridescent "black." The clusters of millerite in concretions often appear, at least to me, to be a "cat's whisker." However, the specimen I picked up in Tucson is completely different from the concretion specimens in that the millerite is a mass of hairlike acicular crystals---hundreds of them. They have a measured hardness of 3.0-3.5 (Mohs), are metallic opaque, and have a greenish black streak.



Fig. 7: Masses of millerite crystals. FOV ~ 4 mm. *Photo: M. Nelson*

The specimen I purchased has a locality listed as Biggsville Quarry, Carthage, Illinois; however, that might be the Biggsville Quarry Cessford Construction, or the nearby Cessford or Media quarries. All are aggerate quarries of Paleozoic carbonates with minor amounts of the sulfides chalcopyrite, sphalerite, pyrite and millerite.

I am still not certain that a definite answer exists as to the source of the sulfides but Wenz and others (2012) believed the ores of the Mississippi Valley-type Deposits (such as the Viburnum Trend, the New Lead Belt in the Missouri Ozarks) are the result of the introduction of sulfides into lead- and zinc-rich ore fluids that in turn were derived from the 1460 Ma Precambrian basement rocks. The sulfides may have been derived from local organic- and sulfur-rich carbonate rocks. Galena (lead) and sphalerite (zinc) are noncomplex sulfides and are the stable forms in a low temperature environment (the depositional environment of the Mississippi Valley-type Deposits). Marcasite and pyrite, common simple sulfides found in the carbonate rocks of the Midwest, may be the result of precipitation

from marine waters (I think).

Another thought seems to center around fluid movement from the deep basins present in the Midwest to the rims of the basins during later orogenic events. In this model the source of the metals is leaching from sedimentary and other rocks (Precambrian basement?) at higher temperatures in the deep basins, and then migrating to shallower levels where they can combine with free sulfide ions, probably resulting from the action of sulfide-reducing bacteria in the shallow rocks (model from Stefano, 2014, discussion on www.Mindat.com).

A happy day is a day when I hit the bed with a sense of satisfaction for the day well lived at a rock, mineral, and fossil show.

- (apologies to Jagadish)

REFERENCES CITED

Bailey, E.H., F.A. Hildebrand, C.L. Christ, and J.J. Fahey, 1959, Schuetteite, a new supergene mineral: American Mineralogist: Journal of Earth and Planetary Materials, v. 44, no. 9-10.

Cooper, M.P. and C.J. Stanley, 1991, Famous mineral localities: Pyromorphite group minerals from the Caldbeck Fells, Cumbria, England: Mineralogical Record v.22, no. 2.

Wenz, Z.J., M.S. Appold, K.L. Shelton and S. Tesfaye, 2012, Geochemistry of Mississippi Valley– type Mineralizing Fluids of the Ozark Plateau: A Regional Synthesis: American Journal of Science, v.312, no. 1, 22-80.

President's Corner

2020 Satellite Group Chairs

Kevin Witte/ Bob Germano, Crystals

John Massie/ Bertha Medina, Faceting

Jerry Suchan/ Joy Price, Fossils

Vacant, Jewelry

Sharon Holte, Lapidary

Vacant, Micro-mount

Vacant, Photography

Steven Veatch/ Betty Marchant, Pebble Pups

2020 Liaisons

Florissant Fossil Beds National Monument: Steven Veatch

Western Museum of Mining and History: Steven Veatch

Pebble Pups Steven Veatch



Presidential Matters



Message to the Staff and Club Members

I was hoping to hear from the Mount Carmel Center about their ability to have meetings. They have not received permission to have group meetings of more then 10 people yet. I am hoping we can start again in July.

Message to Club Members

I want to remind all club members that any one can lead a field trip. If any one wants to lead a field trip contact me.

CSMS Pebble Pups and Earth Science Scholars

<u>NOTICE</u>: Regular Pebble Pup meetings are <u>CANCELED</u> until Sept 2020

- Please visit our blog for special announcements and field trips: <u>http://pebblepups.blogspot.com</u> <u>http://www.csms1936.com</u>
 - Find your assignments at: http://pebblepups.blogspot.com/p/merit-badge-assignments.html?m=1

Field Trip to Rocky Mountain High Claims #1 & #2 May 16, 2020

Trip Report Adelaide Bahr

On Saturday May 16 John Massey led a caravan of 12 cars to the Rocky Mountain High 1 and 2 claims north of Divide. This was the first field trip of the year and the first CSMS field trip in the Covid-19 era. We avoided carpooling and wore masks at the meeting areas. The county roads and the forest road were in good shape. The claims are located on a hill top that was burned in the past and is now covered by 5-6 ft tall Aspens. There are several granite outcrops, many old filled holes, and plenty of room to scatter.

Chris Burris found a vein of semi-weathered granite 2-3 feet below the surface and unearthed several amazonite clusters, he is going to clean them and will bring them to one of our future meetings. Club member Ray Quin exploited a nearby hole and found many whole crystals of amazonite and one small crystal of smoky quartz. Kim Simmet was thrilled to find her first ever intact amazonite crystal.

Below: A Pasque flower basking in the sun at CSMS Rocky Mountain High claims May 16, 2020. *Photo: Laurie Tomsha*



Above: A blackened burnt Pine crowded by new 6' Aspens at CSMS Rocky Mountain High claims May 16, 2020. *Photo: Adelaide Bahr*



Close-up of Chris Burris's Amazonite crystal at CSMS Rocky Mountain High claims #1 & #2, May 16, 2020. *Photo: Adelaide Bahr*



Kim Simmet has a handful of treasures found at CSMS Rocky Mountain High claims #1 & #2, May 16, 2020. *Photo: A. Bahr*





Chris Burris found a nice Amazonite crystal at CSMS Rocky Mountain High claims #1 & #2, May 16, 2020. *Photo: A. Bahr*



Ray Quin's stash at CSMS Rocky Mountain High claims #1 & #2, May 16, 2020. *Photo: Adelaide Bahr*



Left: Jerry and Dan working the CSMS Rocky Mountain High claims #1 & #2, May 16, 2020. **Right**: Jerry found some nice clear smokies. The gems on the bottom are the smokies after they were cut by fellow club member Randy.



View of the Doris claim from the Rocky Mountain High claims #1 & #2, May 16, 2020. Photo: Barbara Middlemist

Footprints in Stone: Trackways at Toadstool Park Steven Wade Veatch

Introduction

Toadstool Park is an interesting geological site in the Oglala National Grasslands, near the town of Crawford. In this quiet corner of northwestern Nebraska, rocks of Eocene, Oligocene, and Miocene age are magnificently exposed. The park features sandstone channel deposits that include the fossilized footprints of rhinos, giant pigs, camels, birds, and other animals. One of the longest known mammal trackways of the Oligocene epoch are preserved in the park (Nixon and Lagarry 1993).

Varying hardness of the local rocks resulted in unequal erosion, leaving the more resistant channel sandstone precariously balanced on pedestals of softer rock. Early visitors, who thought the area's features resembled toadstools, named the park.

Around 30 million years ago, a broad, shallow river flowed through this hot and humid area, attracting prehistoric mammals that came to drink. The currents carried and deposited layer upon layer of volcanic material, sand, and silt. Over time, these deposits were cemented together to form rocks containing the fossil record of early Great Plains animals that roamed the area 30 million years ago. As the Cretaceous sea receded, the High Plains emerged, gradually becoming gently rolling grasslands.

The "High Plains" orogeny, a period of plateau uplift culminating about 10 mya, brought about the Toadstool Park Fault. This normal fault, running approximately southwest to northeast with an offset of about 25 to 30 meters (600 to 800 feet), goes through the park (Leite, pers. comm.). This uplift brought these rocks up 1,220 to 1,520 meters (4,000-5,000 feet) above sea level and is responsible for their rapid erosion today.

The relentless action of wind and water eroded the rocks into badlands, exposing this remarkable record of small horses, camels, huge land tortoises, gigantic pigs, rhinos, and other animals.

Stratigraphy of Toadstool Park

The stratigraphy (sequence of rocks) starts with the oldest Eocene age Chadron Formation, followed by the Oligocene Brule Formation, and then the Miocene age rocks of the Arikaree Group.

The Chadron Formation consists of finegrained, light brown to pink claystones. The Chadron ranges up to 90 meters (300 feet) in thickness. These rocks were formed largely from widespread deposits of volcanic ash, now mostly weathered into clays. Channel sandstones can be found, along with occasional veins of opal and chalcedony (Leite, 1999). The Chadron rests on the Cretaceous Pierre Shale.

The Brule Formation, which overlies the Chadron, was named for the Brule Indians of western Nebraska and South Dakota. The Brule is the uppermost formation in the White River Group and is exposed over much of the West, including Nebraska, North and South Dakota, Colorado, and Wyoming (Leite, 1999).

The Brule varies in lithology, becoming finer grained toward its top and includes the Orella

(lower) and Whitney (upper) Members. The Whitney Member, up to 85 meters (270 feet) thick, is composed of massive siltstones interrupted only by a few ash beds (Schultz and Stout 1955). The Orella Member, 60 meters (200 feet) thick, contains numerous beds of poorly sorted arkosic sands, interbedded with siltstones and claystones (Leite, 1999). The Orella Member frequently weathers into a "knife-edge" form.

The southern part of the park contains the Arikaree Group, consisting of these three formations from the oldest to the youngest: the Gering, Monroe Creek, and Harrison Formations. Only the Gering, appearing as a white siltstone of volcanic ash, is exposed in the Toadstool Park area (Leite, 1999).

Trackways

Geologists refer to fossil tracks and trails as "ichnofossils." Largely ignored until about 20 years ago, these important fossils offer paleontologists a glimpse of animal behavior (Orr and Orr, 1998).

Many different kinds of animal tracks are preserved in the bedding planes of the Orella



Figure 1: Animals living about thirty million years ago made tracks on these broken slabs of sandstone. Some of the tracks have been interpreted to belong to an agile rhinoceros, *Subhyracodon*. Many of the toes point in one direction, indicating this was a migration route. *Image: Michele Veatch.*

Member of the Brule Formation. The tracks are distinctive from the other depressions in the rock—they do not occur randomly but have a degree of direction and orientation.

Much of the mammal community is possibly represented here, including three-toed and four-toed animals, both large and small. Some tracks have been interpreted as being made by the large rhino, *Subhyracodon* (Figure 2). The



Figure 2: Illustration of *Subhyracodon* by Charles R. Knight. Public domain.

tracks show that the rhino was walking along the river, probably browsing on plants. Something startled this animal, causing it to run downstream through the mud, using the channel as a path.

Even-toed tracks show the presence of enteledonts—giant wild pigs that were scavengers, following the herds of rhinos. The smaller rhino, *Hyracodon*, horses, and oreodonts (hoofed mammals distantly related to modern camels and swine) also walked along the river, leaving their tracks. The entire trackway, extending nearly 1.2 kilometers (three fourths of a mile) documents one of the longest migrations preserved in stone for this period of geologic time.

Summary:

The sandstone channel deposits of Toadstool Park feature fossilized footprints of rhinos, giant pigs, birds, and other animals. Preserved in slabs of sandstones are tracks that show aspects of these ancient animal's behavior such as walking, running, and stopping to drink. This remarkable area gives visitors a glimpse back to the ancient beginnings of the Great Plains.

Acknowledgments

Thanks to Beth Simmons, Metropolitan State College, who provided valuable comments on this paper.

References:

- Leite, M (1999), Field Trip to Toadstool Park, http://cscms.csc.edu/NaturalSci/ TOADSTOO.HTM
- Nixon, D. A. and Lagarry, H. E. 1993. New trackway site in the White River Group type section at Toadstool Park, Nebraska: paleoecology of an Oligocene braided stream, riparian woodland, and adjacent grassland. *Journal of Vertebrate Paleontology* 13 (supplement to number 3): 50 p.
- Orr, W. and Orr, E. 1998. *Oregon Fossils*. Kendall-Hunt, Dubuque, 390 p.

Schultz, C. B., Stout, T. M. 1955. Classification of Oligocene sediments in Nebraska. Bulleting of the University of Nebraska State Museum 4: 17-52.

Urban Rock Hunt

On 26 May 20, CSMS rock hounds rolled into Dick's Rock shop for a free give-away in the outdoor rock yard.

Many treasures were found that day. Various shapes and sizes of rocks were laid out in open crates. Most rocks were still covered in mud and



dirt, and had to be sprayed with water to find out what's inside. Kudos to all the rock hounds for hunting treasure every chance they get, even in the city!

Cheers to the nice owner Mrs. Diane for making this opportunity available to our club. The store is closing after 42 years in business. Thanks Diane! Thanks to club member Frank Rosenberg for ALL of the photos. Thanks Frank!



Secretary's Spot

Lisa Cooper

2020 CSMS Officers

John Massie, President Vacant, Vice-President Lisa Cooper, Secretary Ann Proctor, Treasurer Adelaide Bahr, Membership Secretary John Emery, Editor Chris Burris, Member-at-Large Renee Swanson, Member-at-Large Sharon Holte, Past President

2020 CSMS Chairpersons

John Massie, Program Coordinator John Massie, Show Vol Coordinator Mike Webb, Field Trip Coordinator Steven Veatch, 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 Representative Vacant, Federation Representative

Hey! We still need to nominate and elect a 2020 CSMS Adult Rockhound of the Year!

• Please refer to the November 2019 issue of the Pick & Pack, page 3. If you do not have a copy, you can access www.CSMS1936.com and go to the Newsletters. Print off a form or two and nominate your best rockhound!!

Meeting Minutes

Colorado Springs Mineralogical Society

No minutes to present at this time



"Code of Ethics"

A large measure of the enjoyment of our hobby consists of collecting in the field. For that reason, the members are proud to endorse the following:

I will respect both private and public property and will do no collecting on privately owned land without permission from the owner.

I will keep informed on all laws, regulations or rules governing collecting on public lands and will observe them.

I will, to the best of my ability, ascertain the boundary lines of property on which I plan to collect.

I will use no firearms or blasting material in collecting areas.

I will cause no willful damage to property of any kind such as fences, signs, buildings, etc.

I will leave all gates as found.

I will build fires only in designated or safe places and will be certain they are completely extinguished before leaving the area.

I will discard no burning material - matches, cigarettes, etc.

I will fill all excavation holes which may be dangerous to livestock.

I will not contaminate wells, creeks, or other water supplies.

I will cause no willful damage to collecting material and will take home only what I can reasonably use.

I will practice conservation and undertake to utilize fully and well the materials I have collected and will recycle my surplus for the pleasure and benefit of others.

I will support the rockhound project H.E.L.P. (Help Eliminate Litter Please) and will leave all collecting areas devoid of litter, regardless of how found.

I will cooperate with field-trip leaders and those in designated authority in all collecting areas.

I will report to my club or federation officers, Bureau of Land Management or other authorities, any deposit of petrified wood or other materials on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes.

I will appreciate and protect our heritage of natural resources.

I will observe the "Golden Rule", will use Good Outdoor Manners and will at all times conduct myself in a manner which will add to the stature and Public Image of Rockhounds everywhere.

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Our Staff... 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 welcomed. 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.

Articles are preferred in MS Word, preferably NOT pdf, but the editor will correct font.

e-mail to the editor: physikker@gmail.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.

Classifieds and Announcements

ANNOUNCEMENTS

Unfortunately, and with deep regret, Pikes Peak Gem & Mineral Show originally scheduled for June 12-14 is CANCELLED due to circumstances surrounding the COVID-19 pandemic.

ANOTHER FIELD TRIP!

June 13, 2020 Rocky Mountain High 1&2

CSMS President John Massie is leading another field trip to our club claims on Saturday, June 13, 2020. Gather at the Divide Venture Foods Store and we will depart for the claim together at 9:00 AM.

Divide Venture Foods address: 11115 US-24, Divide CO 80814. It's on the right hand corner of US-24 and CO 5 (a.k.a. N. Manchester Creek Rd) just past the Teller county jail.

Instructions:

-- State social distancing requirements will be in effect in the staging areas, also on site at the claims while hunting

-- Car pooling is discouraged

-- Suggested equipment: shovel or hand shovel, rock hammer or pick, any other digging tools you have instead, bag or small bucket to store found treasure, spray bottle for cleaning mysterious rocks, hat, gloves, sunscreen, camera

-- Pack a lunch and lots of water

-- All holes dug must be refilled before you leave. Also, please help us fill previously unfilled holes if you find any. -- 4WD not required, however a vehicle with HIGH CLEARANCE is advised. Not super high clearance like a monster truck, just take the highest clearance vehicle you have. Driving a vehicle with especially low clearance is a bad idea.

Great, that's it - go get some fresh air!

More Classifieds and Announcements

ROCK GIVE-AWAY! FREE! Back on after temporary pause

DICK'S ROCK SHOP: 594 S Santa Fe Ave, Fountain, CO 80817

Dick's Rock Shop in Fountain is going out of business after 42 years. Items are going fast inside the store but not moving quickly enough outside in the "Rock Yard."

The owner says she wants to "get as much of the rock into the hands of rockhounds as possible." May 26, - June 13, Diana is offering the contents of her outside rock yard FREE to local area rock hounds and rock club members. Here are the details:

Days and times are **Tuesdays through Saturdays** from **10:30 am to 4:00 pm**. Gate closes promptly at 4 PM no exceptions.

The rock yard is right next to the building, the gate will be closed, but unlocked. When you enter or leave, **please close the gate behind you**. Do not leave gate wide open. You are welcome to enter and look through the rocks and take what you want – outside only.

Bring the following essentials:

- Your own container
- A mask
- Spray bottle (Water)
- Social distancing

Specimens are not labeled – use your rockhound skills to identify the treasures available. The owner will not be available to answer questions.

No restroom facilities are available – plan accordingly. Remember the store is closed to the public. There is a 7-11 across the road and a Loaf and Jug down the street.

For questions please contact club member Valerie Babitz valerieb_214@msn.com

Postage Here



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 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: <u>www.csms1936.com</u>. 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