Lake George Gem & Mineral Club

Club News September, 2019



NOTE: LGGM Club meetings in April through October will start at 9:00 a.m.

Program for the Month: Saturday, September 14, 2019, 9:00 a.m.

Mining History of the Gold City Claim

Steve Gorman will give a talk on his family's mining history at the Gold City Claim as well as items of interest from the previous mines. **Bob Baker** will then talk about the geology of that area.

Scheduled Programs at Club Meetings:

October - Bob Carnein, Central Colorado Geology

November - Doug White, Newmont CC&V, Geology of Cripple Creek-Victor Gold Mine

<u>December</u> - Towel show, no presentation

<u>Silent Auction:</u> We need donations for the silent auction at our club meetings! If you have "extras", whether minerals, fossils, books, or other items, and if you have a label saying what the item is and where it came from, we can use it. If not, bring some cash and be prepared to help support Club activities, including scholarships, Pebble Pups, and other items.

LGGM Club Field Trips:

A note from the Field Trip Coordinators:

In late September we have two joint trips with the Littleton Gem & Mineral Club to our claim and theirs, so this will be a great time to meet new people! We also have a great two-day educational trip hosted by Bob Carnein in October.

If you have issues or questions, please contact me at dave@davealex.com.

Please share your pictures of your finds and adventures on our trips on our Facebook page and with Jerrolynn at jerrolynn@wildblue.net so that they can be included in our newsletter.

Thanks, and happy digging! --dave and Laura

Change in Field Trip Leader for Book Cliffs field trip October 5-6, 2019: Please note that LGGM Club field trip leaders Dave Alexander and Richard Kawamoto will not be available to lead this trip. Chris Rayburn, from the Mile High RAMS is leading the trip and welcomes our

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members. The group of RAMS and LGGM Club members will be meeting at 9:00a.m. at a site near Grand Junction. Detailed directions and a map along with Chris's contact information are posted the field trip signup page on line,

SCHEDULE OF LGGM CLUB PROGRAMS, FIELD TRIPS & EVENTS			
Date(s)	What	Where	Leader/Notes
Sa 9/14	History of Gold City Claim	LGGM Club Presentation	Steve Gorman
Sa 9/21	Honey Bee/Queen Bee Mines – quartz, amazonite, fluorite, topaz	Harris Park Community Center – 154 Shelton Dr. Bailey CO 80421	Dave Alexander
Sa 9/28	Piety/Patience		Dave Alexander
W 10/2	Hwy 115 Pierre Shale Fossils		Paul Combs
Sa 10/5	Book Cliffs - Day 1	Grand Junction Area	Joint trip with RAMS – RAMS Field trip leader is Chris Rayburn
Su 10/6	Book Cliffs - Day 2	Grand Junction Area	Joint trip with RAMS – RAMS Field trip leader is Chris Rayburn
Sa 10/12	Central Colorado Geology	LGGM Club Presentation	9:00a.m. Bob Carnein
Sa 10/12	Central Colorado Geology #1	GOG, Manitou Spr, Cave of the Winds, Crystola	10:30a.m. Bob Carnein
Su 10/13	9:00 a.m. Colorado Springs Area Geology Day #2	Ute Pass (Woodland Park to Rainbow Falls)	Bob Carnein
Sa 11/9	Newmont CC&V Geology of Cripple Creek-Victor Gold Mine	LGGM Club Presentation	Doug White
Additional Presentations and Field Trips to be added after they are confirmed.			

<u>ADDITIONAL COMING EVENTS OUTSIDE THE LGGM CLUB:</u> (Nearby gem, mineral, fossil and geology events that you may enjoy.)

- Cañon City Geology Club, meets on the 2nd Monday of the month at 6PM in the United Methodist Church, Cañon City
- Columbine Gem & Mineral Society, meets on the 2nd Thursday of each month, 6:30PM in the meeting room, Mt. Shavano Manor, 525 W. 16th (at J St.), Salida
- Colorado Springs Mineralogical Society, meets on the 3rd Thursday of each month at 7PM in the Mt. Carmel Veteran's Service Center, 530 Communication Circle, Colorado Springs;
- **Pueblo Rockhounds**, meets on the 3rd Thursday of each month at 6:30PM in the Westminster Presbyterian Church, 10 University Circle, Pueblo.

September 7 Denver Gem & Mineral Show will be advertised with a parade float in the **Arvada Harvest Festival Parade.** Volunteers are needed to assist with the float and to help with the Kids Corner and other activities at the show.

The Denver Gem and Mineral Show is looking for club member volunteers for a day of fun at the second of two Denver Metro area parades! Some of you will have already seen this announcement--the Denver Gem and Mineral Show is sponsoring a float in the Arvada Harvest Festival, Sat. Sept. 7. Volunteers are *urgently* needed to sign up to be on, march alongside of, or help drive, the float-mobile! What could be more fun? If you can help with that, please contact Iva Veselinova (she helps do publicity for the mineral show), 720-469-2926 or e-mail: iva.veselinova@gmail.com as soon as you possibly can!

Volunteer Sign-Up for Arvada Harvest Festival Parade September 7, 2019

Volunteers are also sought to help at two activities at the Denver Gem and Mineral Show, Sept. 13-15 at the Denver Mart: The "Kid's Corner" with hands-on rock and mineral specimens, sponsored by the U.S. Geological Survey, and "Minerals that Do Things", hands-on demonstrations organized by Dr. Andrew Sicree of State College, PA. If you volunteer to help at either booth for a morning or an afternoon, you'll receive complimentary admission to the entire show. You may contact Pete Modreski, pmodreski@usgs.gov, about helping at either, and I'll put you on my own volunteers' schedule, or pass your name on to Andrew. Thank you!

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Lake George Gem & Mineral Club

Sunday, October 13, 2019 9:00 am - 4:30 pm

Royal Gorge Dinosaur Experience

44895 W. US 50, Cañon City (303-818-3084 for more information) cindysmithrocks@me.com



FREMONT STONES 'n BONES & ROYAL GORGE DINOSAUR EXPERIENCE Sponsors





From your Campfire to your Bed:
The Evolution, Importance, & Relationship
Between Dogs & Humans

Presenter

Dr. Sue Ware, Forensic Pathologist and Paleontologist; Research Associate, Denver Museum of Nature & Science







This program will touch on the migration and evolution of dogs, the duties dogs perform, famous and infamous dogs, etc.

Sue is a paleopathologist and osteologist who specializes in carnivores. She is also a research associate at the Denver Museum of Nature & Science in the Department of Zoology and at the George C. Page Museum at the La Brea Tar Pits in Los Angeles, where she conducts research on comparative anatomy and paleo-pathology of carnivores, primarily the dire wolves and sabertooth cats. Her current research focus is on the antiquity of disease among fossil and modern wolves.

Sue's doctoral dissertation was on the pathologies of the dire wolves as compared to modern gray wolves. She contributes to National Geographic and the Discovery Channel programs on Pleistocene predators.

Morning Session:

- Barking up the right tree: The Evolution of the Canidae & how they found us at the campfire
- Little Red Riding Hood & The Dire Wolves of Winterfell: Dogs in Myth, Legend, & our Imagination

Afternoon Session:

- Dogs doing Duties that we do too: The Dogs of War, Rescue, Therapy, Medicine, & Outer Space
- Wolves in the Bed: Famous, Infamous, and just plain old dogs & why we love them

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Pete Modreski also suggests the following upcoming events:

Aug. 30-Sept. 2, Ken King (retired geologist) is holding a Rock & Mineral Yard Sale and (free or mostly free) giveaway of specimens especially to teachers, at his home, 2949 Vivian St., Wheat Ridge (south off 32nd Ave. east of Youngfield, on the right by the curve at the end of the block). Ken says, "I have a lot of Ruck's Pit (calcite crystals replacing fossil clams), Texas Springs (agatized limb casts), Blue Mountain agates, etc. I am also planning a 8x2 ft "hunt" pan for kids that will have sharks and ray teeth, quartz, fluorite, garnet crystals. Lots of invertebrate fossils and stuff." You can write to Ken at kenwking@aol.com, or just show up. I imagine the hours will be 9 a.m. to 5 p.m. Ken has held a similar rock sale/freebie giveaway several times in the past couple years. He says "this may be the last time", if he can dispose of most of his material.

Tues, Sept. 3, "Golden Beer Talks" at the Buffalo Rose, 1119 Washington Ave., Golden. First talk for the Fall: Rebecca Lynn Brice, "**Tree Rings and Snow Drought: What Trees Tell Us About our Changing Snowpack**". Held on (usually?) 2nd Tuesdays. Doors open at 6; Talk begins at 6:35; Intermission – 7-7:15; Q&A/clean up 7:15-8.

Here is the rest of the schedule for the Fall:

Oct 15, Donald Sweetkind, Geologist, USGS, "From Uravan to Rulison: Tales from Colorado's Nuclear Past" Nov 12, Bob Raynolds, Geologist, CSM Adjunct Prof and DMNS Research Associate, "Australopithecines to the Anthropocene: A Geologist's View of Where We Came from and Where We Are Going"Dec 10, Barb Warden, Goldentoday.com, "Funiculars of Golden Colorado".

Wed., Sept. 4, 4:00-5:00 p.m., CU Geological Sciences Colloquium Series, Benson Earth Science Building Room 180, Karen Chin, Department of Geological Sciences: Associate Professor, University of Colorado Boulder, "**Analyses of dietary residues within Cretaceous dinosaur dung: surprising insights into the feeding habits of large herbivorous dinosaurs.**"

Abstract: Fossilized feces shed light on the behavior of extinct animals, the structure of ancient ecosystems, and the movement of carbon resources through paleoecosystems. A rare assemblage of fossilized feces from the Upper Cretaceous Kaiparowits Formation of Southern Utah reveals unusual dietary habits that challenge common assumptions about the feeding behavior of large herbivorous dinosaurs. Analyses of multiple coprolite deposits from different stratigraphic levels indicate that some plant-eating dinosaurs consumed rotted wood and crustaceans, probably as a seasonal food source. This discovery suggests feeding behaviors that have no modern equivalents and appear to reflect nutritional requirements related to fundamental differences in life history strategies between megaherbivorous mammals and dinosaurs.

Please also join us for Colloquium Social Hour after the Colloquium, 5 to 6 p.m., BESC 185, "An hour of science,

Fri., Sept. 6, 3:00-4:00 p.m., Denver Museum of Nature & Science Earth Sciences Colloquium, Flowering plants enter the canopy: Fossil woods and the Cretaceous diversification of flowering plants, by Nathan Jud, William Jewell College. VIP Room at DMNS; all are welcome.

Sept. 6-15, Colorado Mineral and Fossil Fall Show, Crowne Plaza Hotel - Airport, 15500 E. 40th Ave. Denver, CO.

Sept. 6-16, Denver Coliseum Mineral, Fossil, and Gem Show, Denver Coliseum; see http://www.coliseumshow.com/

Sept. 7-8, 1st Annual Denver "Just Minerals Event", Embassy Suites Hotel, 4444 N. Havana St.; wholesale and retail mineral dealers.

Wed., Sept. 11, 6-9 p.m., **Colorado School of Mines Geology Museum Annual Open House**, to showcase new exhibits for the opening of the Denver Gem and Mineral Show. 1310 Maple St., Golden CO; all are invited. Campus parking is free after 5 p.m.

Sept. 11-14, Denver Fine Mineral Show, Denver Marriott West, 1717 Denver West Blvd.; see http://finemineralshow.com/denver/

Sept. 13-15, 52nd annual Denver Gem and Mineral Show, Denver Mart, 451 E 58th Ave., Denver,

CO. Minerals of Canada is the 2019 show theme. See http://denvershow.org
Thurs Sent 40 5:20 p.m. Calerada Scientifia Society hasts an avaning of

Thurs., Sept. 19, 5:30 p.m., **Colorado Scientific Society** hosts an evening of short oral talks and poster presentations; all are welcome. At the Arbor House, Maple Grove Park, 14600 W. 32nd Ave., Golden (Applewood area). Social time, refreshments, and poster viewing, 5:30 p.m.; 7:00 p.m., oral presentations (4 15-minute talks). **Sat., Sept. 28,** 9 a.m. – 3 p.m., "**Scout Day" at Dinosaur Ridge.** "Join us for Scout Day at Dinosaur Ridge. Scouts of all ages will have a fun-filled day of geology and paleontology. Cub Scouts and

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Webelos will be able to earn belt loops and academic pins. Boy Scouts will be able to earn their Geology Merit Badges. There will be amazing vendors such as: Mr. Bones, Western Interior Paleontological Society, USGS, Wildlife Experience, Rocky Mountain Bird Observatory plus Dinosaur Ridge volunteers at the paleontological sites along the Ridge AND manning hands-on activities such as gold panning, metal detecting, track painting, and fossil sifting at our Main Visitor Center. For more info, and to register in advance (\$6 for Scouts, \$5 for non-Scout accompanying friends/family) see http://dinoridge.org/scout-day/.

Sat.-Sun., Oct. 5-6, the Colorado Scientific Society will host a weekend field trip, "**Geology and Geoheritage of the Florissant-Cañon City-Florence area**". It will include Florissant Fossil Beds National Monument; Skyline Drive by Cañon City; Royal Gorge; the Florence coal, oil, and gas basin; the Cope-Marsh quarries at Garden Park; and the Cripple Creek and Victor Gold Mine. You must be a CSS member to take part, but anyone may join the Society if they wish to go on the trip; see http://coloscisoc.org/.

Tues., Oct. 8, 7:00-9:00 p.m. Western Museum of Mining and Industry Speakers' Bureau Lecture: **"Cripple Creek's Cresson Mine: The Untold Stories**", by Ben Elick. WMMI, 225 North Gate Rd., Colorado Springs. \$5 per person, free to museum members. RSVP to 718-488-0880 or rsvp@wmmi.org; to book in advance: https://fareharbor.com/embeds/book/wmmi/items/108438/calendar/?flow=41147

Oct. 13-19 is the annual **Earth Science Week**. I (Pete Modreski) will be leading a geology hike/field trip for the public sometime during or around this week--details TBA.

Sat., Oct. 19, 9 a.m. – 3 p.m., "**Girl Scout Day" at Dinosaur Ridge.** An event similar to Scout Day on Sept. 28; more info about this day will be forthcoming.

Mon., Oct. 28, 3:00-4:00 p.m., Denver Museum of Nature & Science Earth Sciences Colloquium, Physical processes in carbonate sediments: Ooids, mud, hurricanes, and more, by Lizzy Trower, CU Boulder. All are welcome. VIP Room at DMNS.

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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/ **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/colloguium

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 Museum of Nature and Science, Earth Science Colloquium series, 3:00-4:00 p.m., VIP Room unless noted, day of the week varies. Museum admission is not required;

see http://www.dmns.org/science/research/earth-sciences/

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.

Nerd Night Denver is a theater-style evening featuring usually 3 short (20-minute) TED-style talks on science or related topics; held more-or-less monthly at the Oriental Theater, 4335 W. 44th Ave., Denver; drinks are available; for ages 18+. Admission is \$6 online in advance, \$10 at the door. See https://www.nerdnitedenver.com/.

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

Western Interior Paleontological Society (WIPS); beginning January 2019, WIPS will meet on the 1st Monday of the month, 7 p.m., at Lowry Conference Center, 1061 Akron Way, Denver. See http://westernpaleo.org/.

LGGM Club News:

At the August Club meeting, Ben Elick, who is a Pebble Pup member and an intern at the Western Museum of Mining, presented an outstanding 36 minute talk on the Cresson Mine which contained never-before seen pictures and newspaper articles. This was an excellent trial run for Ben as he prepares to give this talk at New Mexico Tech in November. It was very well received by the members present at the LGGM Club meeting

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From Wayne Orlowski we have the following links:

All you would like to know about coprolites:

https://www.rockngem.com/coprolites/?utm_source=newsletter&utm_medium=email&utm_campaign=r_g_Newsletter080119

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The Man Who Tried to Claim the Grand Canyon

Ralph H. Cameron staked mining claims around the Grand Canyon, seeking to privatize it. When the federal government fought back, he ran for Senate.

https://daily.jstor.org/the-man-who-tried-to-claim-the-grand-canyon/?utm_term=Read%20more&utm_campaign=jstordaily_08012019&utm_content=email&utm_so_urce=Act-On+Software&utm_medium=email

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LGGM Club Annual Show:

Our 20th Annual Gem & Mineral Show was a success due to the efforts of many people. With their invaluable time and help this show ran quite smoothly. Our recorded attendance totaled 1472 for the three days, but actual attendance was probably closer to 1525 due to some vehicles entering or exiting at the wrong gates. We had 35 mineral/fossil/jewelry vendors plus a food vendor. The "Kids Activities" seemed to please our Junior Rockhounds. Many smiles! Most vendors generally seemed pleased with the show and many of them have already reserved their spaces for next year. IT WAS A FUN SHOW! Mark your calendars for next year's show August 14th – 16th.

Carol Kinate, Show Coordinator

Thanks to Volunteers

From Richard Kawamoto, President: It's almost Labor Day, which means another club show has come and gone. I would like to express my appreciation to all the club members who helped to put together another successful club show, either as a volunteer and/or attendee. In particular, Carol Kinate, this year's show chair, did a fantastic job of juggling the numerous tasks over the past several months that were necessary for a smoothly run event. In addition to organizing the show, she successfully implemented a mineral hunt for young rockhounds, which was enjoyed by many. In addition, a well-deserved hand for John Rakowski for aiding Carol as she learned the job of working with different businesses that are part of the infrastructure entailed in an outdoor show. Volunteers are key to having this club event, and a special thanks go to Bev and Don Keith, who doggedly filled in the volunteer matrix sheet so

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that traffic control and the LGGM Club booth would run without a hitch. And kudos go to all the vendors and patrons, without whom there would be no show. So, a hearty thanks to all those who came by to see all the wonderful mineral and lapidary products, and to the vendors, and particularly to Jay Penn for volunteering to be both the show vendor chairperson and the show host. He did a terrific job of organizing/registering all the vendors as well as making sure things ran smoothly during off hours. Finally, our sincere thanks go to the Lake George Company and its owners, the Johnson family, for once again allowing us to host this annual event on their property which both benefits the club and Lake George.

From Beverly and Don Keith, Show Volunteer Coordinators:

A sincere "thank you" to the following club members who volunteered to work the club's Gem & Mineral Show as Club Tent Hosts, Parking Helpers, and assisting with Field Layout and two Show Teardowns. Several of these members volunteered to work more than one shift and/or day. All helped to make the show one of the best in the area.

Thank you to Dave Alexander, Jerry Anderson, Stephen Avery, Fil & Val Babitz, Ed Bondezeleske, Bob & Gail Campbell, Bob Carnein, Darlene Cotton, Jerry Crossland, Robert Crossland, Norma Engelberg, John Gibbs, Steve Gorman, Sharon Griffith, Russ & Margaret Huard, Lorrie Hutchinson, Francine Jampetero, Carol Kinate, Darlys Lopez, Mary Loy, Joe Mahan, Barbara Middlemist, Peter Modreski, Roger & Joanne Petrik, Sharon Reichert, Roger Rhodes and Norma Alexander Rhodes, Richard Rust, Thomas Sandefur, Dan Schrenstein, John Sprouse, Michael & Irma Stauffer, Myles Walden, Laurence Wegelin, and David & Gerdy Wyatt.

From Carol Kinate, Show Coordinator:

I also wanted to personally thank everyone that Don and Bev Keith had acknowledged for volunteering at our annual Lake George Gem & Mineral Show. Their time and efforts were very much appreciated. In addition, I also want to thank several other people that helped me with my job as Show Coordinator: Richard Kawamoto, Jerrolynn Kawamoto, John Rakowski, Don & Bev Keith, Jay Penn and Roger Rhodes. Your contributions (mega time and superb expertise) made our show a good one. Thank you very, very much!

Show Photos and Vendors

(All photos by **Bob Carnein**)



Overview of the 2019 Lake George Gem & Mineral Show



Lunch Box, Etc. provided food and drinks for the show.

Lake George Gem & Mineral Club

2019 SHOW VENDORS

Below are photos and business cards for most of the vendors of this year's show. We thank all of the vendors who participated in our show and we apologize to any vendor whose photos or business cards have been inadvertently omitted.





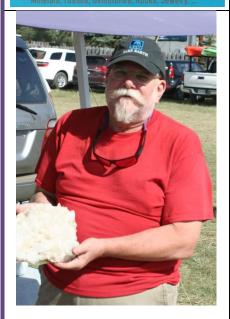








Aaron Bankes Minerals



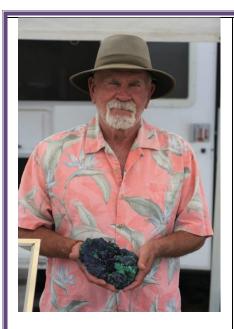
AGTA Stephen Avery



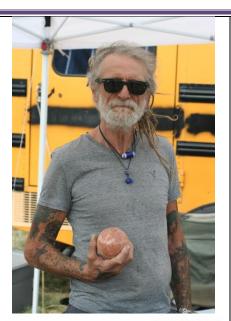
David McCloskey



Distinctions of Nature



Doug St. Pierre



Duck's Gems 541.206.0590



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James Ralph Duck

Instagram: Duckdammit2 Duckdammit@yahoo.com











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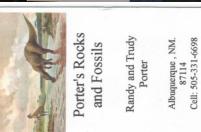














Rockhound Studios





Lake George Gem & Mineral Club





The Original Tree Folk

David Daniel

Walking Sticks/Log Home Decor TreeFolkArt.com 719-373-5660 David@TreeFolkArt.com Hand Crafted in the USA



Umplebys





Alpine Rock & Rustic, LLC

Richard & Jerrolynn Kawamoto

Gemstones & Mineral Specimens Faceted Gemstone Jewelry Sterling Bezel-set Jewelry Wire-wrapped Jewelry

etsy.com/shop/alpinerockandrustic alpinerock@wildblue.net 719-748-8152









Blue Owl Rocks



El Chivo Viejo
Minerals & Lapidary

Jay & Amy Penn

(505) 883-4195

jaypenn246@gmail.com











Lunch Box, Etc.













Pebble Pup News:

Cripple Creek Park and Recreation Department Presents A Geoscience Adventure Class

Field Studies in Paleontology: Exploring the Shelf Road From Cripple Creek to Garden Park, Colorado



September 7, 2019

Hot Science Cool Programs!



Starting in Cripple Creek, this outdoor excursion offers an unsurpassed opportunity to explore the geological and paleontological wonders along the Shelf Road. The class will begin with a brief discussion of local gold mining operations, rocks, minerals, and fossils. The group will then set off for observation points south of Cripple Creek to explore geological features spanning millions of years. The field trip down the Shelf Road is a perfect route to investigate rocks, an ancient seabed, and incredible fossils. Participants will follow old wagon roads used to haul dinosaur bones from Garden Park to Cañon City, explore a site where dinosaur bones were quarried, and investigate nearby dinosaur tracks.

- Participants will board a park and recreation bus and begin exploring the back country of Cripple Creek, and then travel down the Shelf Road with many stops and photo opportunities.
- The basics of paleontology will be reviewed while in the field.
- Collecting techniques and field photography will be demonstrated.
- Participants can collect specimens at several stops.
- Regional geology will be reviewed from overlooks in the area.
- Several archaeological sites will be examined along the way.
- This class is perfect for teachers K-12 (<u>recertification credits</u>: 0.5 semester credit hour available through the Colorado School of Mines for additional fee (\$40.00) payable at start of the class).

Date: September 7, 2019 Time: 8:30 am to 6 pm

Place: June Hack Community Center in Cripple Creek

128 E. Bennett Avenue, Cripple Creek, CO 80813

Fee: \$45.00 adults, \$12 students (high school and middle school) includes field guide, and

transportation from Cripple Creek to field sites. Snacks will be served on board the bus.

Register: Call Cripple Creek Park and Recreation at 719-689-3514 today. This class will fill

quickly. Payment of registration fee in advance is the only way to reserve your spot on

the trip.

Please bring a sack lunch to enjoy. The bus will return to Cripple Creek around 6 p.m. If you wish to stay after class, Cripple Creek offers many interesting diversions.

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Here is the latest installment of "Bench Tips" by Brad Smith: (www.BradSmithJewelry.com)

FOREDOM STAND

A quick and easy way to suspend a flexshaft over your jewelry bench is to use some steel pipe components from the hardware store. You can buy it today, attach it with a couple screws, and it only costs about \$10. I use 1/2 inch galvanized pipe and fittings. To build a stand that attaches to the top of your bench, all you'll need is a flange and a thirty inch length of the pipe. If you prefer a stand that attaches to the side of your bench, you'll need a little longer pipe, three foot, a flange, and a 90 degree "street ell". Finally, make a hook that goes into the top of the pipe to hang the motor from. You can use heavy coat hanger wire or 1/8 steel rod from the hardware store.





BROKEN DRILLS

Have you ever broken a drill bit off in a hole? Sometimes you can grab it with pliers, but other times the steel piece is below the surface in the hole. If this happens, a quick fix is to dissolve the steel in a solution of alum or fresh pickle. The solution will not affect your silver or gold piece.

Alum is typically available from a food store. It's used to preserve some foods. Use about a tablespoon per cup of warm water. Submerge your piece so that the partially drilled hole is facing up to let the bubbles float free and not block the hole.

Work Smarter With Brad's "How To" Jewelry Books www.Amazon.com/author/bradfordsmith

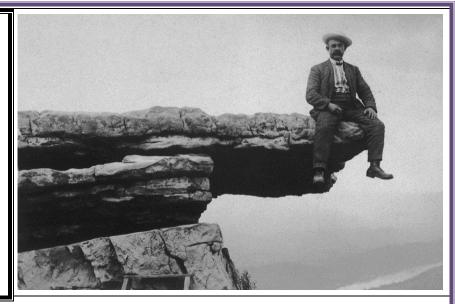
Happy hammering - Brad

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Notes from the Editors

Jerrolynn Kawamoto Editor jerrolynn@wildblue.net 719-748-8152

Bob Carnein Associate Editor ccarnein@gmail.com 719-687-2739



Sacred Geology's Astro Pockets

By **Bob Carnein**

At the last two Colorado Springs Gem, Jewelry, and Mineral shows, I saw specimens from a cool new fluorite find made by former Delaware resident and recent Colorado transplant, Kyle Warrington of Colorado Sacred Geology (kylewarrington@yahoo.com; www.astropocket.com) (Figure 1). Kyle was visiting the area of Specimen and Sentinel rocks, on the east side of Pikes Peak, in 2015, when he found some smoky quartz that looked promising (Figure 2). This led to excavation of a 1-meter pocket that he named the Astro Pocket (eventually Astro No. 1) (Figure 3), after his golden retriever (Figure 4). The pocket produced large, blocky but well developed, somewhat sceptered smoky quartz crystals in clusters to about 15 kg. After cleaning out the pocket, Kyle continued to poke around, finding a few more smokies on the surface. One of these had a stripe of iron oxide and a partial fluorite crystal that, when cleaned, exhibited two purple corners.



Figure 1. Fluorites from Astro Pocket No. 2. (Photo by Bob Carnein)



Figure 2. Cluster of large smoky quartz crystals from Astro Pocket No. 1. (Photo by Kyle Warrington)

Lake George Gem & Mineral Club



Figure 3. Kyle Warrington with quartz cluster from Astro Pocket No. 1. (See Figure 2). (Photo by Kyle Warrington)



Figure 4. Kyle and Astro. (Photo by Kyle Warrington)



Figure 5. Entrance to Astro Pocket No. 2. (Photo by Kyle Warrington)

Cubic fluorite crystals are relatively common in the cavities in the Pikes Peak batholith, and it isn't too rare to find that they are color zoned. Most of them are a somewhat murky combination of greenish or purplish gray, with occasional purple zones at one or more corners—not really world class specimens, compared with those from many localities in the U.S. Midwest or China. But Kyle was intrigued and returned to the site where he had found the quartz/fluorite combination, just a few meters from the Astro Pocket. He soon excavated the beginnings of a new pocket, named the Astro Pocket No. 2, squirming into a hole about

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0.75 meters high by 1.5 meters across (Figure 5). Besides smoky quartz crystals and a lot of iron oxide, Kyle found more zoned fluorite crystals, and these are arguably the best, though not the biggest, ever produced from the Pikes Peak Granite.

Most of the fluorites average 1 to 1.5 cm across, though some are up to 4.5 cm on edge. Many of them are single crystals that were found "floating" in a light-colored iron-oxiderich unconsolidated clayey matrix that resembles sawdust. Some are attached to large (up to 30 cm) smoky quartz crystals or clusters weighing up to 23 kg. Others coat plates and matrix pieces on graphic granite (Figure 6, 7) or form isolated clusters (Figure 8). A few pieces contain up to hundreds of individual crystals, but most are singles.





Figures 6a and 6b (Close-up). Dozens of color-zoned fluorite crystals with gray quartz crystals on surface of an altered graphic granite fragment. Specimen is about 15 cm across. (Warrington specimen; photo by Bob Carnein)



Figure 7. Isolated fluorite crystal on altered granite. The field of view (FOV) is 3 cm. (Warrington specimen; photo by Bob Carnein)



Figure 8. Cluster of zoned fluorite crystals on altered granite; 4.1 cm across. (Warrington specimen; photo by Bob Carnein)





Figure 9a and 9b. Fluorite crystals from Astro Pocket No. 2, showing typical color zoning and (9b) diffraction caused by internal fracture; 1.3 cm across. (Warrington specimens and photos)

Typically, the fluorites exhibit a whitish body color and purple corners (Figures 8, 9). In many, the purple corners are overgrown by a later transparent layer of colorless fluorite, so the purple phantoms seem to float within the crystals (Figures 9a, 9b). A few have what appear to be oriented fractures that diffract light, producing "rainbow"-like reflections within the body of the crystal (Figure 9b). Other oddities include crystals on which octahedron faces are slightly etched and colored by green overgrowths on lighter colored crystals (Figure 10), twinned crystals with color-zoned corners (Figure 11), and etched crystals in which the purple corners form knobs sticking out from the recessed cube faces (Figures 11, 12). Some of the crystals contain what appear to be very tiny euhedral pyrite inclusions or more "normal" concentric phantoms—lines of purple coloration within the body of the crystal (Figure 12).

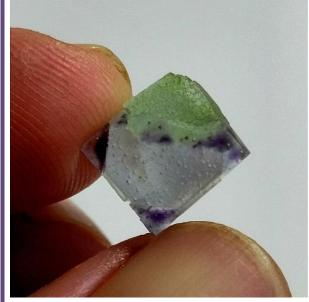


Figure 10. Complex fluorite crystal with green, etched octahedron face; 1.1 cm. (Warrington specimen and photo)



Figure 11. Twinned, zoned fluorite crystal from Astro Pocket No. 2; 1.9 cm. across. (Warrington specimen and photo)

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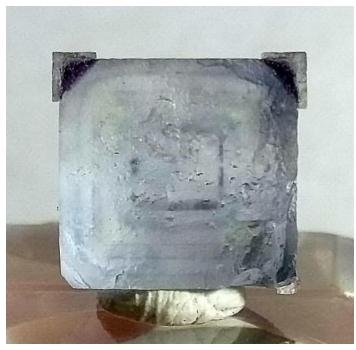


Figure 12. Fluorite crystal showing concentric zoning and etched cube faces, with "knobs" at corners, 1.3 cm tall. (Warrington specimen and photo)

Kyle has scouted the area, along with LGGMC member Laura Canini, and found what may be a trend extending for several hundred meters, with occasional surface finds of weathered fluorites. Although the Astro Pocket No. 1 has been exhausted, by July, 2019 Kyle had excavated the Astro Pocket No. 2 to a depth of 5 meters (Figure 13). The pocket expands inward, making it big enough for him to turn around in the innermost part. Quartz crystals line the ceiling, and the pocket is still producing quartz and fluorite (Figure 14).



Figure 13. Astro Pocket No. 2 from inside. (Photo by Kyle Warrington



Figure 14. Kyle Warrington with an uncleaned fluorite plate (Photo by Kyle Warrington)

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Figure 15. Laura Canini at entrance to Astro No. 1 pocket." (Photo by Laura Canini)



Figure 16. Kyle with new display at Colorado School of Mines Geology Museum. (Photo by Kyle Warrington)

Specimens now reside in a new display at the Colorado School of Mines Geology Museum (Figure 16) and other venues.

<u>Author's Note:</u> A slightly different version of this article first appeared in the July, 2019 issue of "Mineral News".

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Monthly Mineral Quiz



Last Month's Mineral. Albite, Na(AlSi3O8), is the sodium end member of the albite-anorthite series of minerals, collectively known as the plagioclase feldspars. It is especially common in silica-rich igneous rocks and makes up the whitish stripes in microcline feldspar (microcline perthite), including amazonite. It commonly occurs as thin plates or glassy crystals in the pegmatites of the Pikes Peak Granite and other Colorado granites, this being the variety informally known as "cleavelandite".

This Month's Mineral. Here's another mineral that commonly occurs in pegmatite, granite, and metamorphic rocks, including schist and gneiss. It occurs as platy, silvery, light colored crystals that have a vitreous to pearly luster and a hardness of about 2 1/2. Its well-developed cleavage and elasticity are especially useful properties. What is it?



Specimen from the Devils Hole mine, Fremont County., Colorado (Specimen and photo by **Bob Carnein**)



Specimen of high grade gneiss from New Hampshire with small grains of this month's unknown mineral (Specimen and photo by **Bob Carnein**)







The Lake George Gem and Mineral Club is a group of people interested in rocks and minerals, fossils, geography and history of the Pikes Peak/South Park area, Indian artifacts, and the great outdoors. The Club's informational programs and field trips provide opportunities to learn about Earth science, rocks and minerals, lapidary work and jewelry making, and to share information and experiences with other members. Guests are welcome to attend, to see what we are about!

The Club is geared primarily to amateur collectors and artisans, with programs of interest both to beginners and serious amateurs. The Club meets on the second Saturday of each month at the Lake George Community Center, located on the north side of US Highway 24 on the east edge of town, sharing a building with the county highway shops. In the winter, we meet at 10:00AM. From April through October, we meet at 9:00AM, to allow more time for our field trips.

Our organization is incorporated under Colorado law as a nonprofit educational organization, and is a member of the Colorado, Rocky Mountain, and American Federations of Mineralogical Societies. We also sponsor an annual Gem and Mineral Show at Lake George, where collectors and others may purchase or sell rocks, minerals, fossils, gems, or jewelry. Annual membership dues (Jan. 1 through Dec. 31) are \$15.00 for an individual (18 and over), and \$25.00 for a family (parents plus dependents under age 18). New memberships and renewals are only accepted Jan 1 through March 31 each year.

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