

ROAD TRIP: DENVER 2012. Mike Nelson <u>csrockguy@yahoo.com</u> www.csmsgeologypost.blogspot.com

Road trips to area rock and mineral shows are a great way to spend a relaxing day. For me, the best day to attend is always the first since the crowds are usually smaller and the dealer specimens fresher. I was able to attend the recent 45th Annual Denver Gem and Mineral Show and found the exhibited specimens quite beautiful (Figs. 1, 2). The Show theme this year was "Copper and Copper Minerals" and varieties of copper-bearing minerals, as well as large hunks of native copper, were displayed in a spectacular manner. As usual, the colorful blue azurite and green malachite glowed from inside their cases. I spent a large amount of time sort of staring at the displays wondering why I could never find such specimens! I also made the rounds of several dealers and was able to visit with one of my heroes, Bob Jones, the Senior Editor of Rock and Gem Magazine.



Fig. 1. The colorful copper minerals of Arizona.



Fig. 2 New Mexico has produced numerous copper minerals.

February 2013

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.

Proud Members of:

American Federation of Mineralogical Societies (AFMS) www.amfed.org

Rocky Mountain Federation of Mineralogical Societies (RMFMS) www.rmfms.org

Colorado Federation of Gem & Mineral Societies (CFGMS)

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CSMS Calendar

February 2013

Tue., Feb 5—Fossil Group, TBD, 7 p.m., Senior Center. Looking for a new Leader

Thurs., Feb 7—Board Meeting, 7 p.m., Senior Center.

Tues., Feb 12—Micromounts, 7 p.m., Senior Center. Dave Olsen, Leader, 719.495.8720

Thurs., Feb 21—Pebble Pups & Juniors, 5:30 to 6:15 p.m. Steven Veatch, Leader, 719.748.5010 General Assembly, Program TBD, 7 p.m., Senior Center.

Thurs., Feb 28—Crystal Group, Clening Minerals given by Ray Berry, 7 p.m., Senior Center. Kerry Burroughs, Leader, 719.210-6389

Faceting Group, 7 p.m., Senior Center. Paul Berry, Leader, 719.578.5466

Feb, Jewelry Group, By appointment. Call Bill Arnson, Leader, 719.749.2328.

15610 Alta Plaza Cir., Peyton

Feb—Lapidary—By appointment. Call Sharon Holte, 217.5683

March 2013

Tue., Mar 5—Fossil Group, TBD, 7 p.m., Senior Center. Looking for a new Leader

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15610 Alta Plaza Cir., Peyton

Mar-Lapidary-By appointment. Call Sharon Holte 719.217.5683

Other Events of Interest to CSMS Members

Thu., Feb 14—WMMI Heritage Lecture Series: The Geopolitics of Rare Earth Minerals, Dr. Terrence Haverluck. Exhibit opens at 5:30, Lecture at 7pm. Free and open to public. Reservations: 719-488-0880

Mon.-Fri., Feb. 18-22, Annual Book Sale, 9 a.m. – 4 p.m. daily, at two locations on the Colorado School of Mines Campus, Golden CO:

(1) **Arthur Lakes Library**, 1400 Illinois St., Golden. Day 1 prices are \$10 for hardcovers, \$5 for softcovers, and \$2 for maps; prices for remaining inventory are reduced each day. An onsite sealed-bid Silent Auction for more valuable items will be held on Monday, Feb. 18, 10 am to 12 noon. For more info and an advance list of silent auction items see <u>http://library.mines.edu/LB_Book_Sale</u>

(2) CSM Geology Museum, 1310 Maple Street, Golden ; books and "garage sale" books, journals, maps, plus some specimens, equipment, etc., with a focus on geology and minerals. Prices will be reduced each day. For more information see <u>http://www.mines.eduGeology_Museum</u> or call 303-273-3815

Fri-Sun, Feb. 22-24, Gem and Mineral Show, Jefferson County Fair Grounds, Exhibits Building; sponsored by the Denver Gem and Mineral Guild. Free admission & parking; hours 10-6 Fri. & Sat., 10-5 Sun. For more info see <u>http://denvergem.org/Shows.html</u>.

Tue., Mar 5—Joe Dorris mining operation at Crystal Peak, Pilot Peak, and Mt Antero will be featured in a new Weather Channel show called "Prospectors." It will be a reality TV series which features five groups of Colorado mineral prospectors. Rich Fretterd will also be featured. We hit one of the largest amazonite and smoky quartz pockets discovered in the Crystal Peak area last summer and this will be one of the featured "finds."

Sat-Sun, Mar 16-17—WIPS Founders Symposium—Ice Worlds and their Fossils. Green Center. School of Mines, Golden Colorado. See www.westernpaleo.org for more details.

Fri-Sat-Sun, Mar. 22-24, **Fort Collins Rockhounds Gem and Mineral Show**, McKee 4-H Building at The Ranch (Larimer County Fairgrounds), Loveland, CO; at I-25 exit 259; 4-8 p.m. Fri., 9-6 Sat., 10-5 Sun. Admission, adults \$4/day or \$7/3-day pass, students age 12-18 with student ID \$1, children under 12 free with adult. See <u>http://www.fortcollinsrockhounds.org/</u>

Sat., Mar 23—Event at the WMMI: Seminar led by Steve Veatch in Scientific Writing See pg10 for details.

Fri-Sat-Sun, Feb. 22-24, Gem and Mineral Show, Jefferson County Fair Grounds, Exhibits Building; sponsored by the Denver Gem and Mineral Guild. Free admission & parking; hours 10-6 Fri. & Sat., 10-5 Sun. For more info see <u>http://denvergem.org/Shows.html</u>.

The Senior Center is located at 1514 North Hancock in Colorado Springs. For more information on any of the sub-groups, meetings, and other CSMS valuable information, go to our website, csms.us

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Copper (Cu) occurs either as native copper (often raw copper chunks), or is combined with other elements to form a "copper mineral." The former is perhaps best known from the Keweenaw Peninsula of Upper Michigan (Fig. 3; the Yooper Region, check out *Da Yoopers* web site at <u>www.dayoopers.com</u>; known otherwise as the UP). There is evidence that Pre-Columbian Native Americans in the area mined (shallow pits) and gathered the loose copper chunks. Ar-chaeological evidence points to the mineral's use as weapons (projectile points), tools, cookware, and personal ornaments. It is interesting to note that Pleistocene glaciers moved pieces of this native copper (known as drift copper) to large areas of the Midwest and native peoples gathered and used the metal as described above.



Fig. 3. Native copper specimens from the Keweenaw Peninsula.

The UP copper is found in rocks associated with the Midcontinent Rift System (MRS), one of the more interesting geological structures created in the Proterozoic (Precambrian ~1.1 Ga). The MRS (splitting apart) was probably composed of three arms, the result of what geologists term a "triple junction" with the center (the junction of the three arms) positioned approximately at the location of modern Lake Superior. To fix this image in your mind, just imagine the top crust of a pie and how triple cracks develop during baking (but magnify it by zillions!). One arm extended southeast through Lower Michigan while a second arm trended west along the Minnesota-Ontario border. The best known arm, and the longest/largest, extended southwest from the junction for ~ 1200 miles into eastern Kansas. As the rift opened, intrusive rocks such as gabbro formed (Duluth Complex) while extrusive basalt flowed from surgical vents (the rocks are lumped together into the Keweenawan Supergroup). In addition, erosion of the adjacent high-lands dumped (streams and fans) clastic sediments (now sedimentary rocks) into the trough. The extensional rift is similar to the current East African Rift System.

Somewhere in the Proterozoic (after ~15-20 million years of rifting) the continent splitting "stopped" and the rift started to close (a failed rift in geological terms). Perhaps the compression stopping the rifting was the result of orogenic activity (mountain building) on what we now know as the east coast of North America. The failed trench/rift then acquired a variety of sediments and ultimately became buried beneath the Paleozoic marine rocks of the craton (stable part of interior North America). Today MRS rocks generally are buried from Kansas to near (just north) of Minneapolis/St. Paul, Minnesota, but are especially well-exposed around Lake Superior and the Upper Peninsula of Michigan. However, geologists are aware of the well-defined subsurface rift rocks in the south since geophysical magnetic surveys produce a gravity high (dense, iron-magnesium basalt surrounded by low density sedimentary rocks), and in place deep wells (looking for oil) have bored into MRS rocks.

Scientists at Michigan State University have described the <u>(www.geo.msu.edu/geogmich/copper.html)</u> formation of UP copper as follows: most of the native copper occurs at the top of the MRS basalt in a unit known as the Portage Lake Volcanics/Lavas. However, this series actually contains over 200 individual lava flows (now basalts and some rhyolite), and 20 discreet conglomerate beds, that collectively have produced over 11 billion pounds of copper. Over one billion pounds of copper have been extracted from copper sulfides (mostly chalcocite, CuS) in the overlying None-such Shale. The original source of the copper was from secondary deep seated hydrothermal solutions percolating toward the surface with native copper crystallizing in the open vugs and pore spaces.

Waggoner, B. M. 1996, Bacteria and Protists from Middle Cretaceous Amber of Ellsworth County, Kansas: PaleoBios v. 17, no.1

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Whereas the native copper produced in the UP is almost 100% copper (or mixed with other metals such as silver), the copper content of porphyry copper deposits (the copper minerals noted above) is much less, often less than 1%! However, it is these types of deposits that currently are producing most of the world's copper from giant open pit mines observable at famous localities such as Bingham, Utah, and the Lavender Pit at Bisbee, Arizona. Here, hydrothermal fluids associated with a cooling magma plume have deposited copper, and other metals, in both the igneous rocks and the surrounding country rocks such as limestones. At such low percentages of metal, the mining companies have developed extremely efficient methods of extraction and smelting. Native copper is sometimes found at these pits and their dumps; however, the nuggets are quite small (compared to the UP).

Besides the copper exhibits at the Show, several cases displayed a wide variety of other beautiful minerals. I was especially impressed with: a specimen of dioptase crystals $[CuSiO_2(OH)_2]$ from Namibia (Fig. 4; Denver Museum of Nature and Science); chalcoalumite $[CuAl_4(SO_4)(OH)_{12}$ -3H2O] from Bisbee (Fig. 5; University of Arizona Mineral Museum); aquamarine $[Be_3Al_2Si_6O_{18}]$ and quartz [SiO2] from Pakistan (Fig. 6); and of course Gold (Au) from California (Fig. 7; both from Mineralogical Association of Dallas—I think).



Fig. 4. Exquisite crystals of green dioptase.



Fig. 5. Chalcoalumnite on azurite.



Fig. 6. Large crystals of aquamarine and quartz.



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However, my biggest thrill at the Show was to see, touch, and photograph a mineral from Kansas that is extremely rare and where all known specimens (only a few) were collected from a single small locality currently not accessible. This site is now located under several tens of feet of water in a Corps of Engineers reservoir. That mineral is jelinite (Fig. 8), the "Holy Grail of Kansas Minerals!"

Jelinite, first described as kansasnite, is actually a type of amber and is a local name honoring the initial collector, George Jelinek, who found the first specimens in 1937-38 along the Smoky Hill River in Ellsworth County, Kansas (Buddhue, 1939a; 1939b). The amber came from a "layer of soft sulfur-colored clay bounded by two thin lignite layers" (Langenheim and others, 1965). There was some debate about the exact geological formation that produced the amber and originally specimens were ascribed to the Cretaceous Dakota Formation since this unit contains many more lignite beds than the underlying Kiowa Formation. However, detailed mapping of the stratigraphy near Kanopolis Reservoir led Bayne and others (1971) to state "the fossil amber (jelinite) found in the NW SW sec. 18, T. 17 S., R.



6 W. ...probably came from such a sequence [carbonaceous clay] in the lower parts of the Kiowa Formation." This was a confirmation of previous statements by Langenheim and others (1965).

So, the amber did originate in the Kiowa Formation. However, with the construction and filling of Kanopolis Reservoir in 1948-1951 covering the collecting locality, any refinement of stratigraphy is destined for the far future.

Schowe (1942) examined specimens of jelinite and described them as "light butterscotch in color or some other shade of brown. It is waxy, shines as if polished, is cloudy to translucent, and is made up of more or less concentric bands somewhat like agate. The amber has a hardness of about 3... It is brittle and breaks with a conchoidal or shell-like fracture."

Fig. 8. Jelinite, Lower Cretaceous amber from central Kansas.

Although macrofossils seem absent from the jelinite, Waggoner (1996) reported the presence of sheathed bacteria, amoebae and other microfossils. The presence of succinic acid ($C_4H_6O_4$) in jelinite led Buddhue (1938) to suggest a conifer origin for the amber. Langenheim (1969) noted that almost all Cretaceous ambers from North America came from members of the Araucariaceae (a conifer).

I want to thank Glenn Rockers of *Paleosearch Inc.*, Hays, Kansas, for showing me his specimen, letting me hold the Holy Grail, and for allowing photographs. Glenn informed me the specimen in his possession was purchased by an unnamed person at an estate auction and was part of the original Jelinek collection. He also stated there is a much larger specimen floating around in a private collection. Now, if I could only find an estate auction like that!

I'm interested in locating the holy grail of the minimum means to express the most complex ideas. Ben Nicholson

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Schoewe, W. H. 1942. Kansas Amber: Kansas State Academy of Science, Transactions no. 45.

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PICK & PACK

New Discovery of Ute Artifacts in El Paso County

By Luke Sattler

A recent discovery was made in El Paso County, Colorado where a small cache of Ute lithics (stone tools) was buried more than 14 decades—perhaps centuries ago. A number of lithics were carefully buried so that they could be used when the tribe was back in the area. It was like putting valuables in a safety deposit box; however the Ute people used the ground to bury valuables for later use.

Colorado started out originally as an Indian territory and was owned by the Ute people. The Ute used this area as their hunting grounds and traded with pioneers coming through the area and other Native American tribes. When the Utes traded, like most Native Americans, they traded meats and arrowheads for horses, weapons and beads (Veatch, personal communication, 2012).

The Ute who lived in El Paso County and other parts of the state occupied both tepees (figure 1) and wickiups— small



Figure1. Ute encampment circa 1873 by W. H. Jackson. In the foreground is a white goat. The other white images are also goats. Darker goats appear in shades of grey. Photo ID:Jackson, W.H., 1173 courtesy of the United States Geological Survey.

dome-shaped houses made of willow branches stretched into a dome shape and covered with brush. Ute men wore breechcloths that went around their waists, and women wore dresses made of animal hide that were decorated with shells and beads. The Ute's diet consisted of berries that grew in the area and game, such as rabbit, deer, elk, and some bison ("Ute Indians fact," 2011).

For purposes of cutting hide and meat of animals such as elk, deer, rabbit, and possibly bison, the Ute made or traded for the moss agate knife in figure 2. The moss agate knife probably is not from Colorado because there is no known source of moss agate in Colorado.

The Ute probably acquired this knife or the material for knapping it (the making of stone tools) by trading with other native tribes, probably in com-

munication, 20 Wyoming or Montana (Veatch, personal 12).

Moss agate has a hardness of 7, a conchoildal fracture, and a specific gravity of 2.60. Moss agate forms when gas bubbles trapped in solidifying lava become filled with silica and alkali rich water, which then turns into a gel. The "moss" in moss agate is from impurities that form during this process.

The semiprecious opal spearhead in figure 3 was also found in El Paso County. It was also made by the Ute people in the area, and the opal may have come from El Paso County. The Ute used it for stone tools like arrowheads and knives due to its capability of being knapped.



Figure 2. Ute knife made of moss agate from Montana. Scale is in millimeters. Photo \bigcirc S. W. Veatch. Specimen from the Collection of Amanda Adkins.



Figure 3. Semiprecious opal spearhead made by Ute Indians. Scale is in millimeters. Found in El Paso County. Photo © S. W. Veatch. Specimen from the Collection of

New Discovery of Ute Artifacts in El Paso County continued from page 6

Opal is a gemstone commonly deposited by hydrothermal solutions in volcanic rocks. Opal has a hardness of 5.5-6.5 and a specific gravity of 1.99-2.25. Opal has no cleavage but does have conchoidal fracture, which allows it to be knapped.

Opal forms when water deep in the earth dissolves silica from surrounding rocks. When the water/silicate solution enters a cavity, it starts to form tiny silica spheres. If they arrange themselves into a uniform shape and size, they will refract light (precious opal). If they arrange randomly and are not of the same size, then the material will become common opal ("Opal, October's birthstone," 2012).

To conclude, the Ute people used their knowledge of trading, and of the local occurrence of rocks, minerals, and other materials to make tools and decoration. The craftsmanship of their tools allowed the Utes to thrive in moun-

tain areas until they were displaced by the United States government. The two lithic tools recently found in a cache attest to the beauty, craftsmanship, and utility of their tools. **References Cited**



Opal, October's birthstone. (2012). Retrieved from http://www.gemsociety.org/info/gems/ Opal.htm

Ute Indians fact sheet. (2011). Retrieved from http://www.bigorrin.org/ute_kids.htm

Veatch, S. (2012, May 8). Interview by L. Sattler [Personal Interview], cache of Ute artifacts.

Author bio:

Luke is an avid rock, mineral, and fossil collector. He is a member of the Colorado Springs Mineralogical Society and participates in the youth division. He has written a number of papers on the geosciences and has been published throughout the nation. He is in 9th grade and lives in Castle Rock, Colorado.

A Florissant Fossil Beds Spider Discovery: Family Lycosidae

By Zachary J. Sepulveda and Steven Wade Veatch

The Florissant Fossil Beds National Monument is known worldwide for its late Eocene (34 mya) fossil plants and insects. Recently, a fossil spider was discovered at the commercial quarry that is near the fossil beds (Figure 1). Due to the condition of this fossil, it can be assigned only to the family Lycosidae (Table 1) (Rasnitsyn, 2012). This classification would make it a wolf spider.



Figure 1. Image of fossil spider (family Lycosidae) split along the bedding plane of the ancient Lake Florissant shales shows the two halves. Found at the commercial fossil quarry near the Florissant Fossil Beds National Monument. Scale bar in centimeters. Photo © S. W. Veatch.

This fossil wolf spider lived 34 mya under Florissant rocks, within the forest litter, or on short herbaceous plants (Meyer, 2003). Based on its modern relatives, this spider would have had colors that helped to camouflage it, allowing it to hide from its prey (Meyer, 2003). According to the Florissant Fossil Beds National Monument fossil database, only one other member of the family Lycosidae (from the Greek word for wolf) has been discovered there. Petrunkevitch (1922) described this fossil and assigned it to the species *Lycosa florissanti*, from a well-preserved fossil specimen.

Spiders belong to the class Arachnida. Unlike insects, arachnids have eight legs instead of six, have two body sections instead of three, and do not have antennae or wings.

These spiders are incredibly successful—with a lineage stretching back millions of years. With over 100 genera and 2,300 species, they are capable predators spread throughout the entire globe and can inhabit almost every type of environment. From shrub lands to coastal forests, from gardens to alpine meadows, most of these spiders are wanderers and vagrants with no set home or residence but can live just about anywhere (Wolf Spiders in Nebraska).

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A Florissant Fossil Beds Spider Discovery: Family Lycosidae continued from pg7

Wolf spiders hunt in many different ways, depending on the species, size, prey types, and habitats. These spiders are known to ambush and even chase down insect prey. Some species jump from hiding to pounce on prey. These organisms are important controllers of harmful insects, and even though they can be dangerous to people, their presence is generally considered favorable. Most of the few species that stay in one place throughout their lives live in small burrows lined with webs. They simply sit inside and wait for prey to come close, and then they spring from their burrows and attack. Some of these desert dwelling burrowing spiders will even plug their burrows with leaves and pebbles to avoid flooding (Wolf Spiders).

Table 1 . Taxonomy of Wolf Spider from theFlorissant Fossil Quarry		
Kingdom:	Animalia	
Phylum:	Arthropoda	
Subphylum:	Chelicerata	
Class:	Arachnida	
Order:	Araneae	
Suborder:	Labidognathidae	
Family:	Lycosidae	

Wolf spiders range in body size from 10.2 mm (0.4 inches) to 30.5 mm (1.2 inches) long, and can be even larger in diameter with their legs outstretched. In some species, the venom is mild, but in others it is potent and is known to cause necrotic wounds, which create an area of dead flesh (Isbister and Framenau, 2004). Most of the species that have necrotic bites are native to South America and Australia (Ribeiro et al., 1990).

The identification of fossil spiders at Florissant remains difficult because they tend to be poorly preserved, owing to their soft bodies as compared to the harder bodies of insects. This wolf spider, found on a sunny summer day in 2012, is no different than the other fossil spiders that leave unclear impressions in the shale, making identification to the species level all but impossible.

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About the authors:

Zachary Sepulveda recently moved to the Pikes Peak region from San Diego, CA. He became interested in paleontology by visiting the La Brea Tar Pits in Los Angeles as often as he could. He is a junior member of the Colorado Springs Mineralogical Society and is part of the Pikes Peak Pebble Pups and Earth Science Scholars

Program. Zach is 15 years old and is in 10th grade at Palmer Ridge High School in Monument, Colorado.

Steven Veatch lives in the Pikes Peak region. He has been a member of the Colorado Springs Mineralogical Society since 5th grade and is a member of the Western Interior Paleontological Society. Veatch is the leader of the Pikes Peak Pebble Pups

and Earth Science Scholars Program. Veatch lives next to the Florissant fossil beds and continues research in the region.



Introducing New CSMS Board for 2013.

The new board was installed on Jan 19 at the annual banquet held this year at Golden Corral.



Left to right: Susan Freeman Membership, Frank Rosenberg Member at Large, Ellie Rosenberg Editor, Sharon Holte Member at Large, Mark Lemesany President, Ann Proctor Treasurer, Jean Miller Vice President, Renee Swanson Secretary



Mark presents outgoing president Roger Pittman with a plaque



Roger presents plaques to Outgoing Officers

Kay Thompson Vice President







Sharon Holte Editor



Roger presented our featured speaker, Whitey Hagadorn from the Denver Museum of Nature and Science, with a handmade carved desk nameplate. Whitey gave a very interesting presentation entitled Ancient and Future Colorado (what was Colorado like, and what will it be like in 40 yrs?)



I have been a member for a couple of years now. Last year I sat on the board as "Member at Large" and I'm honored to serve as your president this year.

So, what brought me to CSMS? I wasn't much of a rockhound when I was young, but, my mother was! She always wanted to stop and look for rocks. I was like: "Whatever" and went along with her. So, she gets most of the credit!

About 6 years ago, I was hard at work on my other hobby "Poker," when I met a guy who is a close friend now. He has rocks everywhere in his house! I asked what's up? Oh, I found these hiking! So he gets some of the credit. Finally, form cottor gets me in the dirt. I started to find

my occupation as a concrete form setter gets me in the dirt. I started to find some ammonites and collected them! Nothing too special, then I found something different and complete! It is a nautiloid. I wanted to find out



what it was. Looking on-line, I typed in fossils + Colorado Springs. And what should pop up but CSMS website. On the third Thursday of the month I showed up!





Pebble Pups take honors in The National Park Service National Fossil Day Art Contest. By Roger Pittman

Our long time Pebble Pup/Earth Science Scholar leader, Steven Veatch, had strongly encouraged his students to enter this national contest. On January 19, 2013, CSMS's artist Jack Shimon won third place in the 5-8 year old category and Lake George's Pebble Pup Ciena Higginbotham won First Place in the 14-18 year old category. Our Pebble Pup program received special commendations from the Park Service for our informal educational group. The winners were presented with a letter from The National Park Service, NPS backpacks, an autographed CD of Park song and many other goodies. The Friends of Florissant Fossil Beds provided a reception with cake, "mice" and treats.

We were all treated to a guided tour of the new \$3.5M visitor center and study center.

Steve has been the Pebble Pup leader for at least twenty years and was presented with a special plaque thanking him for this service by Past President Roger Pittman. Steve has been very active promoting CSMS activities at many events in the past years and we all need to support these activities in the future.



PICK & PACK

Event at the WMMI: Seminar led by Steve Veatch in Scientific Writing

PUBLISH! History and Science Writing for Teachers and Learners of All Ages.

Location: Western Museum of Mining and Industry 225 North Gate Blvd, Colorado Springs, CO 80921 719.488.0880 Date: Saturday, February 23, 2013 9:00 a.m. to 1:00 p.m.

Writing about nature, history and science offers exciting opportunities to learn, teach and be published. Magazines, newspapers, bloggers, clubs, associations, schools and organizations are looking for articles to share with their audience, and Steven W. Veatch (<u>Click here for Steve's Blog</u>), geologist and educator, can teach YOU how to PUBLISH!

The amazing thing is, this program will be open to youth as young as 13 - Steve's passion is to get young people excited about writing! (Click here to see Steve's award winning work with young writers: <u>Pebble Pubs & Earth Science</u> <u>Scholars</u>)

Topics include:

- Basic research how-to
- Identifying and developing story ideas
- Discovering the difference between a subject and a story
- Outlining and structuring stories
- Strategies for opening and making transitions between your story and its larger context
- Understanding the role of the editor in publication
- Practical session on using photography for articles
- How to approach formal scientific writing
- Ideas for publication of writing projects

All other course materials will be provided with admission, including morning snacks (an additional writer's resource kit CD will be available for purchase for only \$5), and a certificate of completion will be awarded upon completion of the workshop.

The course fee is only \$20 for adults and just \$10 for students (13 - 21 years). WMMI Members receive \$5 off adult admission, and \$2 off student admission. Space is limited to 30 people. Advance registration is required. Please call (719) 488-0880 or email at rsvp@wmmi.org.

Introducing Steven W. Veatch:

Steven Wade Veatch is a geoscientist and an adjunct professor of Earth Science at Emporia State University in Kansas where he received an MS in Earth Science. Steve has been involved in geoscience education for over 25 years. He has contributed chapters to three books: Field Trips in the Southern Rocky Mountains, USA, Field Guide 5, The Paleontology of the Upper Eocene Florissant Formation, Colorado, and The World's Greatest Gold Camp: An Introduction to the History of the Cripple Creek and Victor Mining District. He has written over 100 articles and has attended the Interlochen College for Creative Arts in Michigan to study writing. Steve is from a pioneering family from Cripple Creek. He lives near the Florissant Fossil Beds in Colorado.



2013 CSMS Officers

Mark Lemesany, President

Jean Miller, Vice President

Renee Swanson, Secretary

Ann Proctor, Treasurer

Ellie Rosenberg, Editor

Susan Freeman, Membership Secretary

Sharon Holte, Member-at-Large

Frank Rosenberg, Member-at-Large

Roger Pittman, Past President

2013 CSMS Chair Persons

Kim & Bodie Packham, Annual Show Chairperson

Ron Yamiolkoski, Field Trip Director

Ron Yamiolkoski, Science Fair Chair

Brenda Hawley, Historian

Frank & Ellie Rosenberg, Librarians

Camera Club Chair is Vacant

TBD, Social Committee Chair

Ann Proctor, Store Keeper

Kerry Burroughs, Crystal Studies Group

Paul Berry, Faceting Group

TBD, Fossil Group

Bill Arnson, Jewelry Group

Sharon Holte, Lapidary Group

Steven Veatch, Juniors & Pebble Pups

Dave Olsen, Micromount Group

Gary del Valle, Webmaster

To contact an officer or chairperson, go to csms.us, click on Board Members, and, if their name is underlined, click on it.

Sub-Group	Responsibilities fo Seneral Assembly	or Refreshments for Meetings	Lucille Rioth, Nor nition for Wanda
Feb.—Crystal	Mar.—Faceting	Apr.—Fossil	Installation of 20
May— Jeweiry	June—Lapidary	July—Micromounts	President, Mark I Renee Swanson; Susan Freeman; Rosenberg; Edito
Aug.—Picnic	Sept.—Projects	Oct.—Board	Roger Pittman pr recognized imme
NovTBD	DecChristmax Party		Respectfully subr

SECRETARY'S SPOT

by Jean Miller, CSMS

COLORADO SPRINGS MINERALOGICAL SOCIETY

CSMS General Meeting 18 October 2012

President Roger Pittman called the meeting to order at approximately 7:00 pm with the Pledge of Allegiance.

Program: Tonight's program was presented by Donna Ware and Jeff Self, of Self-A-Ware Minerals. They demonstrated a sophisticated microscope for examining minerals. One example showed distinct silver wire on pyrite that was otherwise invisible to the naked eye. The microscope can take detailed photographs. The microscope comes with software; can split the screen; has LED lights; and is compatible with Photoshop.

Visitors and guests. Several guests introduced themselves and their particular interests. Welcome.

Notices:

The CSMS Executive Board meets the first Thursday of each month, at 7:00pm, at the Senior Center. All are welcome to attend.

The September 2012 general meeting minutes were approved as printed in the Pick and Pack.

New Business:

Installation of new club officers will be held on 17 January 2013 at the Golden Corral at the northeast corner of Woodmen and Powers (near Wal-Mart and Home Depot).

President: Vice-President: Editor: Treasurer: Membership Secy: Members at Large:

open open Ellie Rosenberg Ann Proctor open Mark Lemesany and Sharon Holte.

The meeting concluded with the always fun door prizes given to lucky winners.

The meeting adjourned at approximately 8:40 pm.

Respectfully submitted by Jean Miller.

CSMS General Meeting January 17, 2013

Dinner/Meeting at Golden corral Presentation by Dr. "Whitey" James Hagadorn from Denver Museum of Nature & Science Titled "Ancient and Future Colorado." Roger Pittman presented Whitey with a handmade plaque he created.

President Roger Pittman presented 50 yr member recognition: Lucille Rioth, Norma Wing, and Evelyn Wolfe: 25 yr member recognition for Wanda Ellsworth

nstallation of 2013 CSMS Officers by Bob Landgraf.

President, Mark Lemesany; Vice President, Jean Miller; Secretary, Renee Swanson; Treasurer, Ann Proctor; Membership Secretary, Susan Freeman; Members-at-Large, Sharon Holte and Frank Rosenberg; Editor, Ellie Rosenberg

Roger Pittman presented the RMFMS/AFMS Editor's Awards and recognized immediate past board members with handmade plaques. Respectfully submitted by Renee Swanson.





Our Staff... Ellie Rosenberg—Editor **CSMS Members** Reporters

We encourage everyone to submit articles, photos, illustrations or observations. Share your experiences, trials and tribulations, your new finds, or simply your experience at our last field trip. The ability to write well is NOT

a requirement. We will fix the grammar while keeping the author's voice, style, and work intact.

Handwrite it, type it, or email it. Format does not matter. All submissions are welcomed. DEADLINE for items to be in-

cluded is the Saturday after the Board Meeting - first Thursday of each month

To submit an item, please use the following:

For hardcopy photos or articles, mail to the address below or bring them to the General Assembly Meeting. All hardcopy photos remain the property of the submitter and will be returned. Electronic photos should be submitted at resolutions above 200 dpi in TIF, BMP, JPG, or PIC format. Articles are preferred in word. Editors will correct font and type. All articles not shown with an author are provided by the Editor.

E-Mail to:

csmseditor@hotmail.com Mail to: Pick & Pack Editor

PO Box 2 Colorado Springs, CO 80901

The PICK&PACK is published at least ten (10) times per year; 350-375 copies e-mailed/ mailed per month (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

Faceting Equipment

O'Brien 6" Faceting System includes—lap, mast, dopping sticks, transfer block, angle block, initial instruction sheet and "How to Cut Gems" by O'Brien

Lee Lapidary System 8" unit-includes homemade lap, mast with 64 and 96 index wheels, transfer block

Diamond Syringes—1 partial 8000, 1 15000, 1 2 gm 600 micro, 1- 2 gm 50,000, 5 carats 8,000 powder, and 5 carats 3,000. 1 diamond spray K450 50,000

Laps -

- 1- 6" 8,000 Lucite lap 2- 6" 50,000 Lucite lap 3- 6" metal lap 220 mesh
 - 5- 6" x ½" magic blue wax polish lap
 5- 6" x ½" Lucite lap
 6- 6" copper lap 600/1200
 7- 2- 8" Lucite laps
 6- 72 200 1

 - 8- 8" Aluminum 1200 lap

 - 9- 8" Aluminum 600 lap 10-6" x ¹/₂" metal 30 micron lap
 - 11-6" x 1/2" metal 15 micron lap

Various dops

Faceting Books

Fundamental Faceting - Graves The Book of Gem Cuts -- Vol 3 Faceting for Amateurs Comprehensive Faceting Instructions

CSMS

Faceting Equipment avail-

able for sale. See the list

to the right. The equip-

Maselli at

ment is older and may be

mmaselli77@yahoo.com

Mike lives in Pueblo.

useful for a beginner. If you

are interested contact Mike

T-Shirts, Badges, and Pins

are available for sale.

See Store Keeper, Ann Proctor.

ACKLEY'S ROCKS

Cathy / David / Molly Key **Owners / CDM Rocks LLC** Services: Lapidary, Silversmithing, Goldsmithing, and Jewelry Repairs 3230 Stone Ave. Colorado Springs, CO 80907 719-633-1153 ackleysrocks@comcast.net



Steve & Peggy Willman

114 Main Street, Westcliffe, Colorado 81252 (719) 783-9459 gallery@ris.net

Hurry! Hurry!! Hurry!! Have You Picked Up Your **Membership Award Pin(s)?**

If you celebrated a CSMS anniversary in 2007, 2008, 2009, or 2010, your year pin award is available from the Storekeeper, Ann Proctor. Last call for 2008 pins.

2013 Lake George



GEM AND MINERAL SHOW FRIDAY, SATURDAY, & SUNDAY



PICK & PACK

Dates TBD

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Time Value Do Not Delay

Joining the Colorado Springs Mineralogical Society (CSMS)

General Assembly meetings are held the **third (3rd) Thursday of each month**, except January & August, (picnic) **beginning at 7:00 p.m.** at the Colorado Springs Senior Center, 1514 North Hancock Ave., Colorado Springs, CO. <u>Visitors are always welcome</u>.

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

Yearly dues include 10 issues of the *PICK&PACK*, all field trips (additional fees may be required on some field trips, and members are responsible for all transportation to and from), participation in all Satellite Groups (some groups may request additional fees to help cover resource costs), free admission to the *Western Museum of Mining & Industry*, a year of learning and enjoyment, plus a lifetime of memories.

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

If you are interested in joining CSMS or would like more information, we encourage you to attend our next General Assembly meeting or visit our web site: www.csms.us.