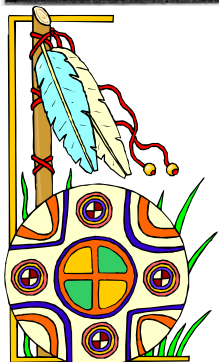


PICK&PACK

THE BULLETIN OF THE COLORADO SPRINGS MINERALOGICAL SOCIETY Published Since 1960



Garden of the Gods Petroglyphs: Messages In Stone

By Steven Wade Veatch and John Harrington

Introduction

A Ute rock art panel was recently discovered at the Garden of the Gods, a park situated on the northwestern edge of Colorado Springs, Colorado. This scenic location is where humans and nature have come together for hundreds of years. Native Americans were attracted to the beautiful rock formations and camped in the area long ago. Ferdinand V. Hayden, while exploring the area in 1869 for the U.S. Geological Survey, stated in his report to Congress that "around Colorado Springs there

is a tract of ten miles square, containing more materials of geologic interest than any area of equal extension in the West" (Scott, 1987).

In 1879 Charles Perkins, President of the Chicago Burlington and Quincy Railroad, purchased most of the land that became the Garden of the Gods. After his death, he left this property to the City of Colorado Springs with two stipulations: first, the land had to be used as a park; and second, it had to remain free to visitors. The Garden of the Gods was dedicated in 1909 as a free city park and has over 1,340 acres.

Geologic Setting

Spectacular faulting and other geologic forces have created the beautiful landscape that has made the Garden of the Gods so famous. A regional mountain uplift (orogeny) began around 300 million years ago (Huber, 1993). This orogeny produced the Ancestral Rockies—perhaps twice the height of the current Pikes Peak (14,110 feet). A pause in the uplift allowed ancient rivers to relentlessly erode these mountains. These rivers carried material, ranging in size from tiny clay particles to large boulders, and spread it out as immense alluvial fans at the foot of the mountains. This deposit, a red conglomerate, is known as the Fountain Formation (named for the creek south of the park) and is exposed throughout the park.

During the Permian Period the Lyons Sandstone was formed from eolian (wind) deposits during a Sahara-like climate. Erosion of the Lyons Sandstone produced some of the unusual rock formations (Figure 1) in the park. The color change from the red lower member to the white-gray upper member of the Lyons

(See "GARDEN OF THE GODS" on page 4)

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JUNE 2007

PICK&PACK

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Number 6

CSMS is an incorporated non-profit 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 monthly to assist and promote the above.

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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 included in the next month's issue is the third (3rd) Friday of every month. To submit an item, please use the following:

Photos:

For hardcopy photos, mail to the address below or bring them to the General Assembly Meeting. All 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:

Mail or email to the addresses below.

ALL FORMATS ARE WELCOMED.

Email: bcain2@earthlink.net or
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PRESIDENT'S CORNER



Drew Malin

As we close in on this year's show, I'd like to thank all of the members that are volunteering their valuable time toward making the 2007 show another in a long string of fun, successful shows.

Keep in mind that our best advertising is still good old word of mouth. Tell all your co-workers, friends, neighbors, and family about our show. You'll be surprised how many people don't know about us, and how happy they are to find out about such a fun thing for their family to do on a weekend in June.

This will probably be said many times in this issue of the Pick&Pack, but it's so important I'll say it again: We need volunteers for the show! I know many of you can't commit to certain times on a sign up sheet because of busy and unpredictable schedules, so here's your way out. Just show up anytime during the show and say, "I want to help!" We are always looking for fill in positions as the show progresses, so it's a great way to help if you can't commit to a specific time.

The club is doing very well this year on field trips; we have already had several successful trips and have many more planned. Having said that, we all know you can never have too many field trips, and I know there are members out there that have places that they could lead us to. So, speak up! Email Brent or Roger, and set up a trip. It's fun and satisfying to share a few secret places with the rest of the club.

Finally, don't forget that we need donations for the Silent Auction!! Just bring them by as early as possible on Saturday. Anything even remotely rock related will sell. It's one of the main ways we make our money during the show, and, as you all know, all the money raised goes toward scholarships in our local community.

See you all at the show!

NEW MEMBER ORIENTATION

Mark your calendars for June 30, 2007. Steve Veatch, Loren Lowe, Rich Fretterd, Glen Beattie and others are presenting a free basic introduction to prospecting, rockhounding, and gold panning classes. Many topics will be included: equipment needed, prospecting methods, maps, and places to look. How to obtain mining property (filing a claim, leasing mineral lands, and county tax sales) will be covered at the end of the class. An overview of the geology of the Pikes Peak Region will also be present.

This course will run from 9 AM to Noon at the Western Museum of Mining and Industry, located just north of Colorado Springs. Attendees should bring lunch for after class and then stay to enjoy a private tour of the museum. We will continue discussions on prospecting, rockhounding, and mining as we explore the museum.



The museum is located at 25 North Gate Blvd. Take exit 156A (Gleneagle Drive) just north of Colorado Springs on I-25 and head east, then turn right onto the museum grounds. You must call the museum at 488-0880 to register for this class as seating is limited, and the class will fill very quickly. Be sure to bring your club membership card for free admission to the class and museum.



Well folks, this is the last reminder that the AFMS Show and Convention will be held in Roswell, New Mexico. The is NEW MEXICO, no Old Mexico. Yes, we are one of the fifty United States. If you don't already have reservations, get them now! This is the first AFMS Convention in Roswell, but they have hosted several RMFMS conventions over the years, and there has always been a surprise event. Sometimes it was created by Nature, sometimes by an extra-terrestrial force. Some feel that it was both. Whatever the source, the fun was foremost. If you don't attend the show in Roswell, you will be missing one of the great ones.



On another note, I receive club bulletins from all over the United States, and I am amazed and awed by the width and breadth of the activities in which the clubs are involved. There are at least two clubs that operate a museum. Many of the clubs have bulletins that contain articles that are of such scientific depth that I have to get out my dictionary to understand what they are talking about.

This is a large and diversified organization. Each club has its own special interests, some are oriented toward fossils, some towards lapidary, and some are mineral collectors. Whatever their primary focus, successful clubs tend to have several things in common. First, they embrace a broad range of activities and interests. They generally have a newsletter and an annual show. Field trips are a must, whether it be for collecting, or for education—such as visiting museums. Lastly, and perhaps most important, they cater to juniors; whether it be a Juniors organization with the club, outreach to schools and/or other junior organizations such as Scouting or special junior activities at their annual show.

Successful clubs try to get the public involved in their activities, especially the younger people.

Is your club a successful club?

MINING HISTORY COMES ALIVE AT THE MUSEUM THE WORKS!

Miners at the turn-of-the century knew their dreams lay buried somewhere in the hills of the American West; the only barricade to a future of prosperity was figuring out how to get the precious metals out of the ground and into their pockets and packs. At the Western Museum of Mining & Industry, visitors experience first hand the lives of these early entrepreneurs and their efforts to develop new and more efficient means of extracting the wealth of the earth.

Today, some of their innovations can still be seen in working order at the Western Museum of Mining & Industry. Rescued from abandoned mining districts, much of the Museum's 4,000 plus item collection originally serviced Cripple Creek, Pikes Peak Country's most renowned gold camp. The entire world of the miner and his business create a complete learning experience for visitors to the Museum.

In support of the outstanding Colorado Springs Mineralogical Society (CSMS), and in honor of Rocky Mountain Federation of Mineralogical Societies, the Museum will conduct a special tour at **10:00 am, on June 26, 2007**. In keeping with the Museum's concept of learning by experience, visitors associated with CSMS will have the opportunity to participate in many of the highlights of the Museum's operations—an experience that would generally take at least two visits!

The CSMS tour will include the following (and much more!): participatory gold panning demonstrations, and an overview of large-scale placer gold mining operations; an introduction to the drilling, blasting, mucking, and hauling of hard rock metals mining. This phase of the tour will include the operation of a ten-ton steam hoist, a drifter air drill, a 1920's Os-good Steam Shovel, and a high pressure Porter Air Hammer. And as you know, gold does not come out of the ground ready to wear. The tour will conclude with an overview of our 1890's concentration stamp mill—the Yellow Jacket II.

(See "WMMI" on page 10)

UPCOMING SHOWS

June 7-10

RMFMS/AFMS Regional Federation show at Roswell, NM.

June 16-17

Rocks for All Ages, NCRC 60th Annual Rock Show w/WY State Gen & Mineral Show, Casper WY. Bonnie Franz 307-265-3187.

June 23-24

CSMS Annual Gem & Mineral Show, "Barite - the Industrial Beauty", Phil Long Expo Center, Colorado Springs, CO. info@csms.us.

July 6-8

Four Corners Gem & Mineral Show, Durango, CO, La Plata Co. Fairgrounds, www.durangorocks.org

FIELD TRIPS

June 9

Gold Camp Road, Contact Ray Berry.

June 8-10

WMMI, 9a-5p, 4th Annual Model Engineering & Historic Power Show.

June 25

Show trip to Hartsel; see Loren Lowe for info or www.csms.us.

June 26

WMMI Mining Exhibit Tour.

June 30

Mt. Antero, contact Alan & Amanda Schaak, (719) 568-0373 amandaalece@msn.com

July 21

CSMS Claim, contact Ray Berry.

August 9-12

CONTIN-TAIL 2007. Contact: Carolyn Tunnicliff, 303-833-2939 ctunnicliff@comcast.net.

August 24-26

Leadville Field Symposium, see registration form for details.



GENERAL ASSEMBLY PRESENTATIONS

June will be our 43rd Annual Show.

Richard Parsons, President of the Colorado Chapter, Friends of Mineralogy, will present "Among us Amateurs—the Basics of Crystal Symmetry" in **July**.

No meeting in **August** (just our Annual Picnic).

GARDEN OF THE GODS—(continued from page 1)

Sandstone is determined by how much hematite (an iron mineral) is present. (Noblet, 1994).



Figure 1. Low-oblique view of North Gateway Rock which is over 300 feet high. This monolith has been eroded from the Permian age red Lower Lyons Sandstone. The top of the picture is west. The sand grains in these rocks are cemented together by silica and hematite, which gives the rock its pinkish color. Photo date 1999 by S. W. Veatch.

About 65 million years ago the Laramide orogeny uplifted the modern Rocky Mountains. When uplift began the ancient Rampart Range fault (beneath the park) was reactivated, causing the horizontal rock layers to dome. The rocks ultimately fractured and moved along the Rampart Range fault. This allowed the rocks on the west side of the fault in the park to remain at an angle of about 50 degrees. The rocks to the east of the Rampart fault were pushed to 90 degrees or more from their original horizontal position. Over time the more resistant rocks became the towers and spires of the Garden of the Gods that attract many visitors each year. The less resistant rocks were eroded away.

The Ute Nation

The Ute people, related to the Paiutes of Utah and the Shoshone of Wyoming, are the longest continuous residents of Colorado. Although their origin is unknown, their presence was first documented in western Colorado approximately 1100 A.D. (Reed, 1994). The Utes are thought to have migrated from the western area of the Great Basin and settled in northeastern Utah, western Colorado, and northern New Mexico. Their territory once covered more than 150,000 square miles of mountains, woodlands, plains and deserts.

The Utes, known as the "Blue Sky People" by other tribes, were skilled hunters and fierce warriors. These early Colorado residents were nomads, living in hut-like structures made of brush and tree branches known as wickiups, or in hide-covered tipis. At times rock shelters were also used. Many traces of the Utes were left in Colorado, including culturally scarred trees (Figure 2), arrowheads, designs on rocks, and occasional shards of pottery.

The Utes followed game trails through high mountain passes and regularly tracked buffalo to South Park, one of their favorite hunting grounds (Marsh, 1982).

After the introduction of horses by the Spanish (about

1640 A.D.), the Utes were able to expand their hunting areas and increase their mobility. By 1870 the Utes were estimated to be about 3,500 people—not a very large group. All of them had been moved to reservations by the late 1800s.

Ute Rock Art

The Ute people created designs on rocks known as petroglyphs (drawings pecked or carved on a rock surface) and pictographs (drawings painted with natural pigments on a rock surface). Research on Ute rock art focuses on petroglyphs and pictographs dated after 1600. Earlier Ute culture is not documented in any detail.

While working in west-central Colorado, noted archaeologist William Buckles defined 2 style categories (Table 1) for Ute rock art: the Early Historic Ute Style, from approximately 1600 A.D. to 1830 A.D. and the Late Historic Ute Style from roughly 1830 A.D.

to 1880 A.D. (Buckles, 1971). The Early Historic Ute Style was influenced by: 1) introduction of horses in the 1600s; 2) contact with settlers; and 3) the growth of western trading posts in the 1800s.

The majority of Early Historic Ute style rock art in Colorado is located in the northwestern part of the state. This early style focused on horses, game animals, weapons, and animal tracks. These figures were typically abstract; animals—particularly horses—appear elongated and disproportionate to other figures. Panels of this style were not organized into compositions and commonly depict solitary settings.

The Late Historic Ute Style, from approximately 1830 A.D. to 1880 A.D., developed as contact between Utes and settlers increased. This style has organized compositions and is more realistic than the Early Historic Ute style. Human and animal figures are more detailed and often show motion.

Garden of the Gods Rock Art Panel

The Ute Pass Trail is one of the oldest documented routes of North American Indians. The trail winds through Garden of the Gods, where the Utes spent winters, and continues on through Manitou Springs before going into the mountains (Pettit, 1990). While in the Garden of the Gods, the Utes created a number of petroglyphs.

A recently discovered panel (Figure 3 and 4) in the park is pecked into the Fountain Formation, and is deeply weathered. This pecked panel has realistic and detailed forms and lacks the abstractions and stick-figured bodies found in the early Ute rock art style.

The Garden of the Gods panel consists of a circle within a circle, a deer, what appears to be the front view of a bison, and a thunderbird. The bison was important to the Utes following the adoption of horses and is common in Ute



Figure 2. The traces of the Ute tribe linger in the Pikes Peak region in the form of culturally scarred trees. The Utes peeled away the outer bark of Ponderosa pine trees to get the cambium layer for food. Photo date 1998 by Jo Beckwith.

rock art. The majestic thunderbird was important in religious beliefs and symbolized a personal helper that provided personal strength (Cole, 1990). This panel could be a message about hunting in the area several centuries ago. All that remains of a deer head petroglyph is a 111 year-old picture (Figure 5) in the archives of the Denver Public Library.

Early Historic Ute	Petroglyphs more common than pictographs.
Style 1660 to 1830 A.D.	Figures are highly abstract, simple, and not in proportion to each other. Stick figures are common.
	Subjects: depicting people (occasionally have shields and spears) horses, bison, and other animals, including, power symbols such as a bird.
Late Historic Ute Style 1830 to 1880 A.D.	Petroglyphs and pictographs.
	Figures are more realistic, detailed, and often show motion. Panes are often crowded with figures and symbols.
	Additional subjects such as tipis, bears, trees, and animal tracks. Ute mythology illustrated.

Table 1. Historic Ute Rock Art Styles. Rock art attributed to the Utes is associated with historic periods because archaeological evidence for the presence of Utes before 1600 A.D. is lacking.

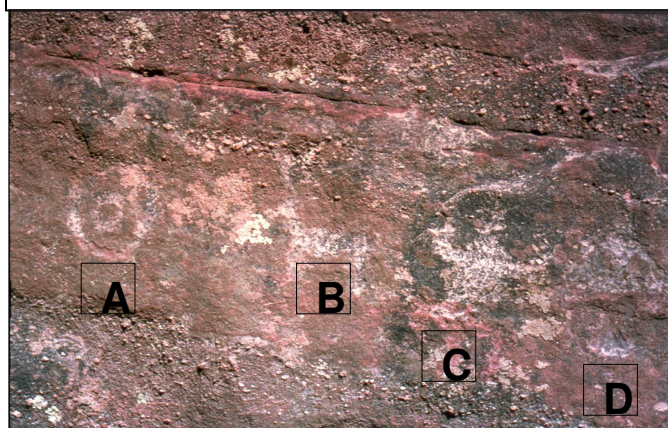
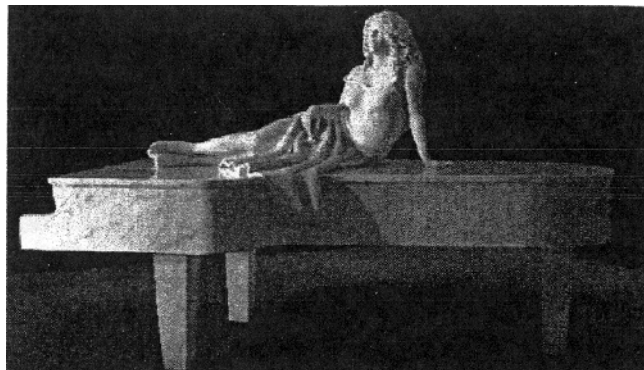


Figure 3. Ute Petroglyphs in Garden of the Gods. Utes once used this ancient site as a camp. From left to right is: (A) a circle within a circle; (B) a deer; (C) the head of a bison, and (D) a thunderbird, a sacred life form in Ute mythology. Photo date 1996, by John Harrington.



Figure 4. Image of Ute petroglyphs in Garden of the Gods with reversed colors (black goes to white). Note bird with outstretched wings is a thunderbird, a powerful spirit helper. (Continued on page 6)



“American Woman” by Colorado artist Francisco. Francisco’s new marble sculpture will be on display at the Pikes Peak Gem & Mineral Show 2007. This life-size awe-inspiring masterpiece was sculpted from a 21-ton block of marble quarried from the Colorado Yule Mine in Marble, Colorado. Autographed photos of the “American Woman” and autographed chips of marble will be given away at the Show.

43rd Annual Pikes Peak Gem & Mineral Show

Featured mineral—Barite

When: June 23rd & 24th, 2007
Saturday 10AM-6PM
Sunday 10AM-4PM

Location: Phil Long Expo Center
1515 Auto Mall Loop
Colorado Springs, CO 80920

For more information:

Web site: www.csms.us

Email: Info@csms.us

Phone: (719) 683-2603

Show proof of membership in a mineral club (membership card or newsletter with your name on it) and get a dollar off show admission.

Discount admission coupons will also be printed in The Gazette.

Free admission to Boy Scouts, Girl Scouts, and Scout Leaders in uniform.

Don't miss our Silent Auction!

***** Thanks to our Sponsors *****

- The Cripple Creek and Victor Gold Mining Company
- The Gazette
- The SilverWood Hotel & Conference Center



Figure 5. Ute petroglyph depicts the head of a deer. Graffiti is scratched into the rock. Photo date 1890 by H. S. Poley. Courtesy of The Denver Public Library, Western History Collection.

Summary

Today few vestiges remain in the Garden of the Gods that marks the presence of the Ute Indians who once inhabited this area. The recently discovered Ute petroglyph panel is a very important link to these native people. The panel is inspired by Ute religious beliefs and may be a chronicle of their hunting activities. This message from the past will one day fade and disappear as the relentless forces of wind, rain, and frost work to remove this important connection to the early Ute Indians.

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MESSAGES IN STONE

By Steven Wade Veatch



Those who are gone once came to this sacred place of remote canyon walls now quiet with grace. They made circles of stones to pray and to fast, to seek a vision for guidance and unite with the past.

Here seekers waited for their spirit guide to appear who came in many forms to give strength and to end fear. The seekers knew this place where others once prayed and had visions of power as long as they stayed.

They left their sacred images to last upon the cosmic rocks: Dancers, flute players, lizards, and birds left as pecked marks. An eternal art on canyon walls of symbols, visions, and more from those who have gone but came here before.

Now the clouds grow dark and are messengers of rain, they bring a breeze scented with sage over the terrain. An eagle soars as a guardian spirit above the canyon below over the messages in stone only the ancients truly know.



FLORISSANT FOSSIL BEDS FIELD SEMINARS 2007

The Friends of the Florissant Fossil Beds summer seminar series includes the following earth science seminars. These seminars may be taken with or without college credit.



GLOBAL CHANGE AND ITS IMPACT ON COLORADO (1/2 CREDIT) June 16, 2007, 9 am to 5:00 pm, Bob Reynolds, PhD. This presentation will place Colorado in the context of some of these world-wide changes. While a long way away from sea level, and in a setting where slightly warmer winters might be welcomed by many, Colorado has already been dramatically impacted by recent changes that may be tied to global patterns. The field of earth sciences has enjoyed a series of profound revolutions in thought that have cascaded throughout our science. The understanding of evolution, the appreciation of the depth of geologic time, and the advent of plate tectonics are three of these. I propose that the recognition of the dynamic character of global climate shares rank among the top five breakthroughs that have impacted our multidisciplinary science. We live in the era where this is taking place and the manifestations are becoming evident. Earth scientists have the opportunity to place these issues in perspective and to assist the populace in making informed, cost effective decisions about reasonable strategies with which to approach our new era. Join the fray.

CENOZOIC GEOLOGY AND HAPPENINGS RECORDED AT SELECTED SITES IN SOUTHWESTERN SOUTH PARK, COLORADO (1/2 CREDIT) June 23, 2007, 9am - 5pm, Don Rasmussen PhD. This field trip will examine various diverse aspects of the surface geology in the region southwest of Hartsel, Colorado – varying from the subtle to the obvious. Rocks and strata in the area range in age from Precambrian to Recent. We will see marine and non-marine sedimentary rocks, folded rocks, igneous rocks, roots and flanks of Eocene volcanoes, Miocene basalt and cinder cone, shoreline of an ancient lake, mineral deposits, gemstone sites, fossil beds, catastrophic ash-fall deposits and lahars, fens and peat beds, historical ruins, archaeological sites, giant spring with secluded swimming holes, Pleistocene plunge pool, exhumed topography from the Tertiary Eocene and Paleozoic Pennsylvanian, and so on. Emphasis will be on the Cenozoic geology (what happened during the last 50 million years). Wildlife will be seen and we may encounter bison, bighorn sheep, elk, deer, pronghorn, bear, coyote, badger, or the rare and endangered cowboy. Special treats will be to witness the “brilliance of bluebirds”, “solitude of heron” or “crossing of cranes”, and not witness the “shock of lightning”, “hail of hail” or “flash of flood”. On June 23, 2007 (Saturday), gather at 8:30am in parking lot at store on west end of Hartsel and leave no later than 9:00am.

THE EOCENE LIFE OF FLORISSANT: PALEONTOLOGY OF THE PLANTS, INSECTS, MAMMALS, AND DIATOMS OF THE FLORISSANT FORMATION (1 CREDIT) July 28-29, 2007* Herb Meyer PhD., Dena Smith PhD., Jaelyn Eberle PhD., Mary Ellen Benson, PhD. This seminar presents a complete overview of the ancient life that lived at Florissant during the late Eocene about 34 million years ago. Using fossil plants, insects, mammals, and diatoms, the instructors will recreate this hugely diverse warm temperate ecosystem that is preserved in the rocks of the Florissant Formation and discuss its implications to the broader regional and global picture of paleontology. The fossil plants represent a forest with gigantic redwoods and diverse hardwoods that provide evidence for the ancient climate and elevation of the southern Rocky Mountains, and show how plant communities responded to an event of significant global cooling soon after the Florissant fossils were deposited. The diversity of fossil insects from Florissant is one of the richest in the world, and Florissant provides important evidence for the way in which these insects preyed on the leaves in the forest and how plant-insect interactions evolved. New discoveries of fossil mammals within the past five years have nearly tripled the number of species known from Florissant, especially for small mammals such as rodents and rabbits. The Florissant lake shales contain the most diverse early fossil record for freshwater diatoms (microscopic golden algae); these diatoms provide an indication of subtle changes in their aquatic habitat through time, and evidence suggests that they may have played an important role in the preservation of other fossils. This seminar will provide a unique opportunity for interaction and discussion with four instructors who are among the leading researchers in Florissant paleontology.

GEOLOGY OF THE CRIPPLE CREEK MINING DISTRICT (1/2 CREDIT) August 4, 2007, 9am - 5pm, Steven Veatch, M.S. and Tim Brown, M.S. The Cripple Creek Mining District is one of the most interesting geologic regions in the country. In this field-oriented program, you will learn about the local geology and tour current operations at the Cresson surface mine. Be prepared for lively discussions and lots of fun as you explore the mining operations that are currently underway and learn about the mining history of this area. Be sure to bring your camera. This seminar will be comprised of a field trip to the Cripple Creek and Victor Mine with a tour of the mine and a presentation of the history and geology of the Cripple Creek District.

Instructor biographies

Mary Ellen Benson is a PhD candidate in Geological Sciences at the University of Colorado at Boulder where she is doing research on the fossil diatoms at Florissant, their paleoecology, and mode of preservation. She holds a Master's degree in Geology from the University of Idaho, Moscow. She has taught high school science and undergraduate university courses in paleontology.

(See “Fossil Beds Seminars on page 8)

FOSSIL BEDS SEMINARS—continued from page 7

Tim Brown M.A., Exploration Manager for Cripple Creek Mining Company. Mr. Brown has a BS in Geology from Southern Methodist, an MS in Geology from the University of Minnesota and an MBA in Finance from the University of Colorado. He has over 20 years of professional experience in gold exploration in Minnesota, the Western US and Central America. He came to CCVM in 1993 as an exploration geologist. He spent 2 years in AngloGold's NA exploration program in Alaska before starting his current position in Cripple Creek.

Herbert W. Meyer, PhD, is the paleontologist at Florissant Fossil Beds National Monument. Meyer surveys Florissant fossil collections at major museums to develop a paleontological database website, publishes research articles and books, and oversees paleontological resource management. His PhD was earned from the University of California, Berkeley, as were MA and BA (Honors) degrees in Paleontology. He is the author of the 2003 *The Fossils of Florissant*, Smithsonian Books. Meyer leads field trips for scientific societies and serves as paleobotanical specialist for other agencies and for international conservation in Peru and China.

Robert G. Reynolds, PhD, has a BA from Dartmouth College, an MA from Stanford University, and a PhD from Dartmouth College. He is currently a Research Associate with the Denver Museum of Nature & Science and is a member of the adjunct faculties of the University of Colorado, Boulder, and the Colorado School of Mines. Reynolds is Co-Principal Investigator on a three year National Science Foundation funded project to examine the synorogenic stratigraphy of the Denver Basin, coordinating a multi-institutional research effort under the aegis of the Denver Museum of Nature & Science. He has taught at a number of colleges and universities, and done fieldwork on an international level, as well as authored numerous publications and conducted lectures on the geology and water resources of the Denver Basin.

Donald Rasmussen PhD., is a specialist on stratigraphy and tectonics of the Paleozoic rocks in Western Pangea in the Four Corners region. He is currently a geologic consultant for the oil and gas industry and working on two publications that will appear as part of a regional study to be published this Fall or early next year. He is a speaker, field trip leader, and has worked in the private sector as well as for the U.S.G.S., and in conjunction with a variety of

educational institutions such as the Carnegie Museum, University of California at Berkeley, University of Kansas, and the Denver Museum of Natural History.

Dr. Dena Smith is an Assistant Professor in Geological Sciences and Curator of Invertebrate Paleontology at the University of Colorado at Boulder. Her specialty is the ecology, evolution, and taphonomy of fossil insects and plant-insect interactions, and her research involves the fossil insects at Florissant. She is an editor for the upcoming book *Paleontology of the Late Eocene Florissant Formation*, Colorado.

Steven Veatch is a geologist, whose research has focused on Colorado geology and mining history. He has conducted educational earth science programs throughout the Pikes Peak region. With colleagues and students from across the nation, he has studied a diversity of earth science topics, including climate change, glaciation, and Colorado's fossil record. He is an adjunct professor of earth science at Emporia State University where he received an MS in earth science. He has written over 100 articles and professional papers on geology. Steven Veatch, who has ownership interests in several gold mines, is from a pioneering Teller and Boulder County mining family. Steve is currently the President of the Friends of the Florissant Fossil Beds, Inc.

To register and for more information call the Florissant Fossil Beds National Monument at 748-3253

Fees and Tuition

\$50.00 fee for each 1 day seminar

\$65.00 fee for each 2 day seminar (must attend both days, no split fees or credit)

\$40.00 discounted fee for current member of Friends, 1 day

\$55.00 discounted fee for current member of Friends, 2 day

Adams State College Graduate Credit Tuition

\$22.50 tuition for 1/2 credit per 1 day, 7.5 hour class








\$45.00 tuition for 1 full credit per 2 day, 15.0 hour class

Please note that you must attend the entire class to get credit.

Boces Recertification Tuition

\$5.00 recertification credit through the Pike's Peak BOCES of Co.

TIPS & TIDBITS:

 **Diamonds**—Only 1/10 of 1% of diamonds are natural fancy color. Diamonds have grain just like wood. When you polish, you go with the grain. When you cut, you go against the grain. *From The Agateer, 6/07*  **Tourmaline**—has 70 trace minerals . . . most gems have 3; comes in more colors than any other gem. *From The Agateer, 6/07*  **Makeshift Rulers**—A quarter is one inch across. A dollar bill is six inches long. So, that's two bucks a foot in paper, but three bucks a foot in change. *From The Quarry, 5/07*  **Mother of Pearl**—For inlay, work can be softened by soaking in vinegar. It can then be easily cut.  **Silver**—Never put rubber in contact with silver; it permanently stains.  **Squeeze Bottle**—Carry a small squeeze bottle (nose spray type) filled with water on field trips; they are small, light, and handy for putting a drop or two on specimens you are checking.  **Wood Dopsticks**—Treat with a light coat of shellac. This prevents wood from absorbing water, cracking the wax, and loosening the stone. *From the 2007 SCRIBE CD; assembled from various club newsletters.*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
JUNE 2007 — CSMS CALENDAR						
					1	2 12N Lapidary Group Meeting
3	4	5	6	7 7p Board Meeting	8 7:30p Crystal Study Group Meeting WMMI—Power Show	9 Gold Camp Field Trip WMMI—Power Show
10 WMMI—Power Show	11	12 7p Micromount Group Meeting	13	14 Flag Day	15	16 3p Jewelry Group Meeting
17 Fathers Day	18	19	20	21 7p Show Mtg 7:30p General Assembly	22	23 43rd Annual Show
24 43rd Annual Show	25 Show Field Trip 7p Faceting Group Meeting	26 WMMI Field Trip 7:30p Camera Club Meeting	27	28 7p Fossil Group Meeting	29	30 Mt Antero Field Trip

"Fatherhood is pretending the present you love most is soap-on-a-rope." - Bill Cosby

Locations

Board Meeting: 1st Thursday
@ 7:00p. SilverWood Hotel
Linda Laverty, 520-5939

Camera Club: 4th Tuesday @
7:30p 1514 Hancock, CO
Roger Pittman: 683-2603

Crystal Study Group: 2nd
Friday @ 7:30p, 1514 North Hancock, COS;
Kerry Burroughs: 634-4576

Jewelry Group: 3rd Saturday
@ 3p; 6608 Gambol Quail Dr E;
contact Rick Copeland: 594-6293 or
Bill Arnson: 749-2328

Faceting Group: 4th Monday
@ 7:00p, Various Locations David
Wilson: 635-7891
dlwilson@pcisys.net

Fossil Study Group: 4th
Thursday @ 7:30p.
John Harrington: 599-0989

Lapidary Group: 1st Saturday
@ Noon 3085 Rhapsody Drive,
COS.
Drew Malin: 531-7594

Micromounts Group: 2nd
Tuesday @ 7:00p, 1514 North Hancock, COS
Phil McCollum: acc@frii.com
Moyra Lyne: 442-2673

REFRESHMENTS FOR GENERAL ASSEMBLY MEETINGS

July=Lapidary September=Micromounts November=Camera
August=Picnic!! October=Fossil December=Everyone

PRESIDENT	Drew Malin	531-7594	advanceone@comcast.net
VICE PRESIDENT	Linda Laverty	520-5939	chilipepper24@juno.com
SECRETARY	Roger Pittman	683-2603	prpittman@netzero.com
TREASURER	Rick Copeland	594-6293	rick.copeland@covad.net
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MANAGING EDITOR	Betty Cain	634-8205	bcain2@earthlink.net
MEMBER-AT-LARGE	John Casto	329-0912	jcasto@fvs.edu
MEMBER-AT-LARGE	Brent Williams	632-3552	zaphod1863@yahoo.com
PAST PRESIDENT	Robert Landgraf	687-3195	RMLWP74@aol.com
SHOW CHAIRPERSON	Kaye Thompson	636-2978	
FIELD TRIP DIRECTOR	Brent Williams	632-3552	zaphod1863@yahoo.com
LIBRARIAN	Sarah Udell	237-7985	sarahudell@hotmail.com
CAMERA CLUB	Roger Pittman	683-2603	prpittman@netzero.com
CRYSTAL STUDY	Kerry Burroughs	634-4576	kburrou@comcastnet
FACETING GROUP	Dave Wilson	635-7891	dlwilson@pcisys.net
FOSSIL GROUP	John Harrington	599-0989	harrington1@mindspring.com
JEWELRY GROUP	Rick Copeland	332-7915	rick.copeland@covad.net
LAPIDARY GROUP	Drew Malin	531-7594	advanceone@adelphia.net
MICROMOUNT GROUP	Phil McCollum		acc@frii.com
PEBBLE PUBS	Vacant		

COLORADO SPRINGS MINERALOGICAL SOCIETY

Minutes, General Assembly

April 19, 2007

President, Drew Malin, called the meeting to order at 7:35 pm.

The April minutes were approved as printed in the Pick&Pack.

Treasurer's Report

No report was given. Rick Copeland volunteered to fill the remaining 2007 Treasure's term.

Guests:

Ten guests/new members were present.

Satellite Groups:

- Camera Club: Roger Pittman reported June competition subject is "wheels" due to cancellation of May meeting (a snow storm in Peyton).
- Crystal Group: Kerry Burroughs reported that the group has adjourned for the summer but you can contact him for more info about summer activities.
- Faceting: Dave Wilson reported the group has a new day/time—4th Thursday.
- Fossils: John Harrington reported will meet at Jim Buck's place..
- Micromounters: No report; see web site.
- Lapidary: Drew's garage, 1st Saturday, see Pick&Pack.
- Jewelry: 3rd Saturday, Rick Copeland's house.
- Field Trips: Hondo Canyon—could be cancelled if there is no interest. Mt Antero on web site, CSMS claim—number of vehicles is limited to 12, sign-up sheet is available or contact Ray Berry. April Fools Claim—contact John Casto—there is a locked gate to the area.
- Other Reports: Bill Arnson is forming a new wire-wrapping group; if interested contact Bill.
- Membership: Bill Cain reported membership is due now or you will be dropped from the mailing list!

Old Business:

- Show June 23 & 24th. Kaye Thompson reports that the Expo Center is under new management. We need volunteers from each satellite group to take tickets. We need volunteers for Friday 8:00 am set-up! Display case set-up begins at 2:00 pm Friday. Field trip to Hartsel for barite on Monday after the show; on Tuesday a special tour of the Western Museum of Mining & Industry.

New Business:

- None.

WMMI—Continued from page 3

While we won't be able to drop the stamps on this occasion, we will operate the line shaft and shake the concentration tables—it's genuinely an experience that few people have had!

Due to CSMS's generous support for the Museum, admission for this special tour (a \$14 per person value) will be reduced to \$7 per person. We look forward to seeing you!

For additional information, please contact the Museum at (719) 488-0880 or visit our web site at www.wmmi.org.

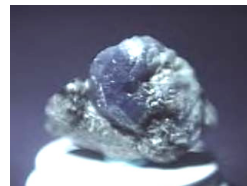


—Cartoon by Erston Barnhart in *Are We Having Fun Yet? An Irreverent but Affectionate Look at Rockhounds*

via Golden Spike News 11/01

JUNE BIRTH- STONE— ALEXANDRITE

FROM WWW.MINERAL.GALLERIES.COM



Alexandrite is the *color changing* variety of the mineral **Chrysoberyl**. Alexandrite is named for the former czar of Russia, Alexander II, and was first discovered in the Ural Mountains of Russia, supposedly on the day of his birth. Chromium gives alexandrite its color and while, in most minerals, a trace element like chromium would provide only one color to the mineral, in alexandrite it gives it two! Coloring agents are dependent on the wavelength of light and the chemical bonds in the crystal to determine the color that they will cause. An element like copper, in normal light, can cause a green color in malachite and a blue color in azurite, it all depends on the character of the chemical bonding. In a single specimen of alexandrite, the chromium is in such a balanced situation that the color of the specimen depends on the character of light that hits the crystal. If the light is natural sunlight or fluorescent light, the crystal will be green; however, if the light is incandescent light from a common indoor light bulb, then the crystal will appear red.

Regular meetings of various groups

Café Scientifique features a talk and discussion on some current science topic; 6-30-8:00 p.m. Tuesday evening once a month (approximately the 3rd Tuesday) at the Wynkoop Brewery (Mercantile Room), corner of 18th & Wynkoop Streets, Denver. No charge; all are welcome.

<http://cafescolorado.org>

Colorado Scientific Society, monthly meetings with one or two speakers on an earth science topic, 3rd Thursday, 7:00 p.m. American Mountaineering Center, 710 10th St. (NE corner with Washington), Golden, CO.

<http://www.coloscisoc.org>

Denver Mining Club, Informal weekly luncheon meetings with a speaker, every Monday, 11:30-1:00, Country Buffet, 8100 W. Crestline Ave., #A3, Littleton, CO (about 1/2 mile north and east of the intersection of Wadsworth Blvd. & Bowles), tel: 303-933-9923. No charge, but all who attend must purchase a lunch at the restaurant. See web site http://china-resources.net/den_min.html

Denver Region Exploration Geologists' Society (DREGS) meets monthly on the 2nd Monday, 7:00 p.m. Consolidated Mutual Water Company (lower level), 12700 W. 27th Ave., Lakewood, CO; no charge, all are welcome to the meetings.

See <http://www.dregs.org/>

Rocky Mountain Assoc. of Geologists (RMAG) has monthly luncheon meetings with a speaker at the Marriott City Center, California St. between 17th & 18th Streets, 11:30 a.m. Luncheon cost is \$24; no reservations are needed for the talk only.

See <http://www.rmag.org/>

USGS Colloquium Series, lectures on Thursday, 1:30-2:30 p.m. Foord Lecture Room, Bldg. 20, Denver Federal Center, Lakewood, CO. USGS staff, visitors, and guests are welcome. See <http://geology.cr.usgs.gov/crg/colloquia.htm>

Western Interior Paleontology Society (WIPS), meets 7:00 p.m. first Monday of the month, Sep-May, Ricketson Auditorium, Denver Museum of Nature and Science, <http://www.wipsppc.com>

CLASSIFIEDS . . .

NOTICE—Items listed for sale in the Pick&Pack are displayed only as an informational service to our members and advertisers. CSMS and/or the Pick&Pack do not promote nor warranty any item displayed. The sellers and buyers are responsible for the condition and ownership of any item shown.

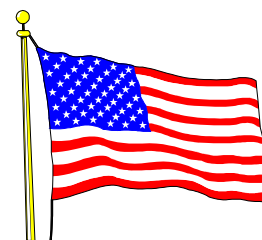


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IT COULD HAPPEN TO YOU!

LOST—BADGE, DECALS, ETC.

By PETER MARTIN, SCRIBE, 6/07

Last December my truck was stolen from Phoenix. It was discovered days later with \$14,000 damage after being used to haul illegal aliens from the Mexico border to Casa Grande. When I came to examine the truck, there were some peculiarities. They stole my bird watching guide. They took about 30 large yellow rockhounding decals and my Mingus Gem & Mineral Club badge but left my wife's. Among the filthy mess of uneaten burgers, discarded underwear, etc., there were eight partly used deodorants, four baseball caps, and what I am told is a can of moustache wax. They did not take any of CD's—Edith Piaf, Katie Melua, Carmina Burana, Gigli and Dusty Springfield were clearly not their taste—but they abandoned an unopened gallon can of Mexican beef stew, nail clippers, and a GPS charger, so we know how they navigated across the trackless desert. Also left behind was the only rock in the truck—a piece of petrified wood, possibly palm. I appeal for your help. If you are rockhounding and come across a swarthy guy with a splendid moustache, long nails, a badge which tells you his name is Peter Martin, very sweet smelling, hatless, his vehicle covered with yellow rockhound decals, and complaining that his 'GPS es morte', let me know!



RMFMS PRESIDENT'S MESSAGE

By RICHARD JAEGER

This is going to be a short message this month because I am having to write early before a couple of projects are ready to be reported on.

My main message is once again to make sure that your club is represented at the RMFMS House of Delegates Meeting in Roswell in June. There will be new officers to elect and probably more than one issue to be voted on. If no one from your club is planning on attending, please contact a neighboring club or your state director and designate someone as a proxy for the House of Delegates Meeting; we definitely want to have a quorum. And, state directors, please contact your clubs to see if need they help along those lines.

This is a busy time in the Oklahoma/Arkansas and Kansas areas of our federation with a show or swap taking place somewhere virtually every weekend for the next two months. I am sure that many of you are swamped with possible activities too. It all culminates in early June in Roswell with the combined AFMS/RMFMS Convention and Show. Show Chairman **Frank Whitney**, Show Advisor **Howie Whiting**, and the rest of the Chaparral Rockhounds have been hard at work to provide you with what promises to be an outstanding experience.

I hope that when you come to the show you will also be able to take advantage of the opportunity to visit some of the geological wonders of this beautiful and fascinating area of our great country. I look forward to visiting with as many of you as I can.



TO ALL CLUBS PARTICIPATING IN THE RMFMS INSURANCE PROGRAM

By ARLENE BURKHALTER

In order to avoid last minute confusion and anxiety, please submit your requests for Additional Insured Certificates so that I receive it at least two weeks prior to the time you need it. One month would be better. It is difficult to get the last minute details exact and sent to the place they are needed. And sometimes, I am not available for a few days.

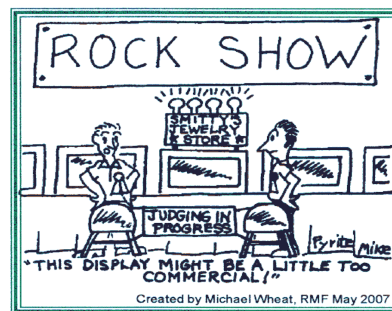
I am a volunteer with older equipment, and my scanner isn't always working, or I am having difficulty getting an attachment to send properly, so I need a few days to get the information to our insurance agent. If you send it direct, they have to check with me to see that the additional fee has been paid, and that you are entitled to ask for additional insured. I know when you call Brown & Brown you get a message to fax the request to them.

Not all of you have faxes. I don't have my unit set up to

send faxes, either.

Brown and Brown have a lot of major companies they handle for commercial insurance and that message is mainly for them. Sometimes, Brown & Brown employees who are assigned to handle the RMFMS policy are out of the office and unavailable. I have called them when it was impossible to reach either the staff that issues the certificate or the manager of that unit.

So, make sure that the person making arrangements for your event in which you need the additional insured certificate sent is aware that it is almost impossible to get it printed and back to you in less than two weeks. We have been lucky so far in getting the certificate in time for the event, but cannot guarantee it. It will save both of us a major headache if everyone follows this notice.



Leadville Field Symposium Friday through Sunday, August 24-26, 2007, in Leadville

Friends of Mineralogy Colorado Chapter will hold a Field Symposium in Leadville, Colorado on the mines, minerals, mining, preservation, and history of the Leadville Mining District. The Symposium will complement the September 2007 Denver Gem and Mineral Show theme, which is Minerals of Leadville. We are planning talks at the National Mining Hall of Fame and Museum in Leadville and tours of the Climax Mine, the Museum, and other mines and mineral localities around Leadville. Ed Raines will give a tour with collecting opportunities. Museum director, Sam McGeorge, will speak, and we are lining up other high caliber speakers for a full weekend. Symposium events will start Friday evening and last into Sunday afternoon. Pre-Symposium historical tour(s) and activities will be arranged for those who are interested.

If you would like to attend this event, please fill out and mail in the registration form below, along with a check for \$20.00 per participant (no cash or credit card), to the FMCC address on the form. Because of logistics on field trips, etc., the number of symposium participants may be limited to the first 75 registrants. If there are limits, the cutoff will be determined by the postmark date on your registration envelop. This registration form and check will pay for all official events. FMCC is not handling lodging, transportation, or meals. However, a box lunch is included with the Sunday tour, and there will be a Saturday night symposium dinner with speaker for which we will obtain a head count and money at a later date.

A list of lodgings and contact information in the Leadville area is below. We have arranged group rates with some of the hotels as indicated, and we ask that you contact the hotels directly and mention to them that you are attending the Symposium. We encourage you to make lodging reservations early. Leadville, which is at 10,000 ft elevation, is a popular place during the summer, and some group rates expire as indicated in said list.

Leadville Motels: be sure to mention that you are attending the Leadville Field Symposium

Alps Motel—Hwy. 24 S.; 207 Elm St., Leadville, CO, 80461; phone 719-486-1223, toll free 800-818-2577

Columbine Inn & Suites—2019 N. Poplar St; phone 719-486-5650, toll free 800-954-1110

Delaware Hotel—700 Harrison Ave.; phone 719-486-1418, toll free 800-748-2004

Grand West Village Resort—PO Box 957, 80461; phone 719-486-0702, toll free 800-691-3999

Mountain Peaks Motel—1 Harrison Ave., 80461; phone 719-486-3178, toll free 888-771-4470

Silver King Inn—2020 N. Poplar St, 80461; phone 719-486-2610

Super 8—1128 S. Hwy 24; phone 719-486-3637, toll free 800-261-3637

Timberline Motel & Apts—216 Harrison Ave, 80461; phone 719-486-1876, toll free 800-352-1876

(These motels and links to their web sites can be found at www.leadville.com/lodging/hotels-motels.asp)

Registration Form

Leadville Field Symposium, August 24-26, 2007, in Leadville, Colorado

Last Name _____ First Name(s) _____

Address _____ City _____ State _____ Zip _____

Email _____ Phone _____

Include a check for \$20.00 per person, payable to **Friends of Mineralogy Colorado Chapter**.

This registration will entitle you to participate in all symposium meetings, tours, field trips, and a box lunch for the field trip on Sunday, August 26.

The number of symposium registrants may be limited to the first 75, determined by postmark date on your registration envelop.

Send this form plus check to: **FMCC, P.O. Box 5276, Golden, CO 80401-5276**.

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Joining the Colorado Springs Mineralogical Society (CSMS)

General Assembly meetings are the third (3rd) Thursday of each month, except August, beginning at 7:30 p.m. at the Colorado Springs Senior Center, 1514 North Hancock Blvd., Colorado Springs, CO. **Visitor are always welcome.**

CSMS also offers Satellite Group meetings that allow more focused attention in specific areas of our members' interests. Our current Satellite Groups consist of the following: Camera Club, Crystal Study Group, Faceting Group, Fossil Study Group, Jewelry Group, Lapidary Group, Micromounts Group, and Pebble Pups. For details of Satellite Group meetings, see page 9.

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—\$20

Family—\$30

Juniors—\$2

If you are interested in joining CSMS or would like more information, we encourage you to attend our next General Assembly meeting (see page 2 for details of the next meeting) or visit our web site: www.csms.us.