



THE BULLETIN OF THE COLORADO SPRINGS MINERALOGICAL SOCIETY Published Since 1960

MAY 2004

Volume 44 Number 4

CURRENT EVENTS

Gold Camp Road Project

Time for CSMS members to speak out

Raymond R. Berry

The Pike National Forest is moving forward with a *Planning/Environmental Impact Statement Project* that involves repairing the collapsed Tunnel #3 in North Cheyenne Canon, and planning whether the eight miles of closed Gold Camp road should be opened.

This area is prime mineral collecting area for the full length of the closure. It is the historic St Peters Dome Mining District. Members of CSMS, as well as Denver area clubs and FM, should be interested in getting access again to this collecting area. One of the important purposes of hobby groups is to protect and preserve our collecting sites and rights.

The Forest Service is actively seeking comment, both written and email. You can call the Pike NF District planner, Frank Landis at (719) 477-4203 or go to the Project website at www.fs.fed.us/r2/psicc/pp for more information and to make comments. You may ask to be kept informed of the progress and to receive a copy of the draft EIS. Click on Gold Camp Road Plan/EIS.

On page 7 is a copy of comments the writer made as a sample: Use this only as a sample of the type of comments that are suitable. How the opening or continued closure may affect you personally, as well as general comments are proper.

See *Letter* on page 7

Feldspar

The CSMS 2004 show mineral

Jack Thompson

The feldspar group of 16 mineral species and their abundance gives way to feldspar being the most prevalent group of minerals in the earth's crust. In most occurrences, feldspars are formed in igneous or eruptive rock such as granite and its pegmatites, vessels in rhyolite, and phenocryst or porphyry.

Crystal-wise, feldspars are tectosilicates with a framework of tetrahedrons extending in all three dimensions. Feldspars fall into four crystal systems. Seven are monoclinic, five are triclinic, three are orthorhombic, and one is hexagonal. Twin crystals are quite common in six forms: the Carlsbad contact, Carlsbad interpenetrant, baveno, manebach, albite, and pericline. There are also many combined twin forms, such as albite twins Carlsbad or manebachs protruding from a face or prism of a larger crystal.

Chemically the feldspar group is divided

into two subgroups. Plagioclase goes from albite $\text{NaAlSi}_3\text{O}_8$ to anorthite $\text{CaAl}_2\text{Si}_2\text{O}_8$. This variable of sodium (Na) to calcium (Ca) produces many different species of feldspar. By holding these elements in solid solution and allowing changes in heat, time and pressure, many of the plagioclase feldspars with no chemical formula change are produced, i.e., orthoclase and microcline, both KAlSi_3O_8 . Potassium feldspars are called alkali feldspars and contain less than 10 percent sodium and almost no calcium. Orthoclase and microcline are the best examples of this sub-group.

Color

It seems the only color we are interested in is green to blue-green microcline called amazonite. Not all microcline is green, nor are all green feldspars microcline. A bright green orthoclase is found at Broken Hill, New South Wales, Australia. Other colors

See *Feldspar* on page 4

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 monthly to assist and promote the above.

Bob Landgraf	President
Drew Malin	Vice President
Sidney Benda	Secretary
James Bushnell	Treasurer
Lorrie Hutchinson	Membership Secretary
Ethan Bronner	Managing Editor
Louis Severini	Member at Large
John White	Member at Large
Kay Thompson	Past President
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American Federation of Mineralogical Societies (AFMS)

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Colorado Federation of Mineralogical Societies (CFMS)

Colorado Springs Mineralogical Society
Founded in 1936



Lazard Cahn
Honorary President

PICK & PACK

Our Staff...

Ethan A. Bronner *Managing Editor*
Cindy Bronner *Assistant Editor*

Robert & Naoko Murphy *Mailers*

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 E-mail it. Format does not matter. All submissions are welcomed.

DEADLINE for items to be included in the next month's issue is the fourth 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. All photos will be returned. Electronic photos should be submitted at resolutions above 200 dpi in TIFF or PICT format. E-mail them to the address below.

Articles:

Mail, E-mail, or fax to the address and numbers below. ALL FORMATS ARE WELCOMED.

E-mail:

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PRESIDENT'S CORNER

Rain, Rocks, and Salt

2004 Rocky Mountain Federation Show

Robert Landgraf



I am just back from the Federation Show in Wichita. While I could see on the TV weather reports that Colorado was getting a healthy snowstorm in the mountains, we were getting some steady rains

in Kansas. Weather cleared for the field trip after the show on Monday. We got to go 750 feet underground to collect rock salt crystals in the Lyons Salt Mine. The cavern was huge with salt crystal pillars bracing a shale-ceiling layer. The salt mine is the Hutchinson Salt member of the Permian aged Wellington Formation. The deposit is some 37,000 square miles and contains 1,100 cubic miles of salt. The repeated flooding and evaporation of a shallow basin of ocean from a period some 210 million years ago deposited the salt. What was most interesting was to obtain some samples with salt-water inclusions from that time period.

The Rocky Mountain Federation of Mineralogical Societies is composed of some 84+ clubs from the various Rocky Mountain States. We as clubs are organized together as an umbrella organization through which we can get our club insurance and organize to provide a unified response to retain access to our collecting sites on public lands. The various clubs can send up to two delegates to the yearly meetings where people can get together to share issues of mutual interest. Each state has a State Director who stays in contact with the clubs of his state. I am happy to announce that Colorado is now represented by our club's own Mike Wheat, elected at the last meeting. The Public

Land Advisory for Colorado is Bob Cranston from Grand Junction.

We do have a committee opening in the federation. We are looking for someone with experience in the area of the insurance business. We are happy with our insurance provider and insurance plan. We would, however, like to have someone with insurance experience to review the Federation's insurance policies and advise the Federation. If you would be interested in this position, please let us know.

An editors' breakfast was hosted at the Federation Show. I have not attended one but it is an event where, in part, recognition is given for outstanding journalism in club newsletters. We seem to often be recognized for our member's articles. I would like to congratulate Steve Willman for his Third Place award for his article, "Leaving Montreal for Pyrite Country." Congratulations also go to Ray Berry for his Fifth Place award in the category "Small Bulletin, Editor" for the Pick & Pack. Tom Odiorne, who is not a club member but authored the article, "That Common Mica," took a fourth place.

We spent a lot of time promoting our Federation Show to be hosted June 2005. Almost everyone I talked to is expecting to see us next year. There is a lot of enthusiasm for coming to Colorado. Everyone seems to have either lived for some time in Colorado or else has a child or sibling or shirttail relation of some sort out here. They are also interested in an extended stay and the five days of field trips that we are running after the show. I want to thank Linda Laverty for the wonderful 2004/2005 show invitation/vacation packets that she put together as handouts for the visiting club delegates. They were a great enticement.

Colorado Mineral and Mineral Fuel Deposits

Through Geological Time

May's General Assembly

James A. Cappa

Colorado has a rich bounty of mineral resources that are an important part of the state's economy. In 2003, the value of mineral and mineral fuel production was over

\$6 billion, and generated about \$248 million in direct local and state taxes.

Precambrian age rocks host deposits of base metal massive sulfides, tungsten,

gold, titanium, feldspar, mica, beryl, niobium, tantalum, other rare earths, and industrial minerals. Many important mineral deposits, especially gold, silver, base metal, and uranium deposits in the Front Range are hosted by Precambrian age rocks but were formed during the Laramide Orogeny of Cenozoic age.

Paleozoic age rocks host a variety of mineral and mineral fuel deposits. Oil, natural gas, and carbon dioxide are found in Paleozoic sedimentary rocks. Marble, gypsum, and limestone are important industrial commodities found in Paleozoic rocks. Important lead, zinc, silver, and copper deposits are found in Paleozoic rocks, such as in the Leadville, Gilman, and Aspen districts, but these too were formed during the Laramide Orogeny. Kimberlites of Paleozoic age contain diamonds and were recently mined.

Mesozoic age rocks, besides having dinosaur bones and tracks, host most of the state's natural gas (including coalbed methane), oil, and coal deposits. Mesozoic rocks also contain gypsum, copper, and uranium deposits. Clay is mined from Mesozoic age rocks along the Front Range.

The Niobrara Limestone of Mesozoic age is an important source of lime and is used in cement manufacture.

Many of Colorado's gold and silver deposits are hosted by rocks of Cenozoic age. These include the precious and base metal deposits of the San Juan volcanic field, the central Colorado volcanic field, and the La Plata Mountains. Colorado's important molybdenum deposits are of Cenozoic age. The state's most famous gold district, the Cripple Creek district, is related to a Cenozoic volcanic event. Other mineral deposits of Cenozoic age include nahcolite, fluorite, and coal. The state gemstone, aquamarine, and the state mineral, rhodochrosite, are both related to the Cenozoic Laramide Orogeny. (see sidebar)

MAY 2004 General Assembly
Thursday, May 20, 2004, 7:30

Colorado Springs Senior Center
1514 North Hancock Blvd, C/S, CO.

May's refreshments courtesy:
The Lapidary Group

Minutes...

April 15, 2004

Bob Landgraf called the meeting to order at 7:40 p.m. Minutes from previous general meeting were accepted.

Treasurer's Report: Jim Bushnell reported on balances of the show fund and general fund. Insurance premium in the amount of \$50 was paid to Phil Long Expo Center.

Satellite Groups: Camera, crystal, faceting, fossil, lapidary and jewelry group leaders announced dates, meeting locations and program for next month.

Show Report:

- Number of display cases were repaired on Saturday, April 3, at the meeting held at the Western Museum of Mining and Industry.
- The floor area is significantly larger than any of past shows. CSMS needs more cases on display - everybody is encouraged to present case, doesn't have to be competitive.
- Instruction for setting up display case will be published in Pick&Pack.

Field Trips:

- Portland Limestone Quarry scheduled on May 1, 2004.
- Jerry Suchan will lead fossil collecting between Woodland Park and Deckers on May 2.

New Business:

- Kaye Thompson informed about forming new scholarship committee. The scholarship will be awarded directly to selected candidate on annual basis and will be applicable to selected colleges and universities of the Rocky Mountain region. Anyone with comments on this program please contact Urban Turzi before May 19.

The general meeting was adjourned at 8:30 p.m., followed by program on history of CSMS by Ray Berry.

We are lucky to be having James A. Cappa as our presenter at this month's General Assembly. His life has been filled with great experiences that will surely come through in his presentation.

JAMES A. CAPP

EDUCATION

Bachelor of Arts degree in Geology from the University of California at Santa Barbara in 1967.

Master of Science degree in Geology from the New Mexico Institute of Mining and Technology in 1975.

EMPLOYMENT

Jim's first job was as an engineering geologist for the U.S. Forest Service in Santa Barbara, California. In 1969, he took a position as a geologist on a copper exploration program for Anglo American Corporation in Zambia before returning to graduate school in 1973.

While a graduate student he spent a summer on a base metal exploration program for WGM, Inc. in the Brooks Range of Alaska.

After leaving graduate school in 1975 Jim spent one year with Amoco Production Company in Denver, Colorado as a petroleum geologist. Jim began work for Houston International Minerals in early 1977 exploring for uranium, tin, and cobalt in the USA and Canada.

In 1981, Jim joined FMC Gold Co. where he conducted and managed gold and industrial mineral exploration programs in the USA, and several overseas locations such as Spain, Brazil, Chile, Turkey, Greece, Italy, Yugoslavia, and Australia.

Since 1991, Jim has been with the Colorado Geological Survey where he is the head of the Mineral and Mineral Fuels Section. Jim's group conducts studies and publishes reports on oil and gas, including coalbed methane, coal, base and precious metals, and industrial mineral deposits.

It is not too late to pay your dues!

Proposed Operating Procedure for Awarding the CSMS Scholarship

On an annual basis, the Colorado Springs Mineralogical Society (CSMS) will form a committee that will:

- Distribute information/applications to area high schools concerning the CSMS undergraduate scholarship program.
- Review scholarship applications to determine the appropriate recipient.
- The amount of the scholarship will be a minimum of \$1000 per year. The source of these funds will be from the annual show profits, fundraising activities and club investments.
- Determine the scholarship recipient based on academic achievement and financial need.
- Accept applications from any resident of El Paso/Teller County, CSMS member's family or any affiliate of CSMS who will be an undergraduate student at the Colorado School of Mines, the University of Colorado, Colorado Springs (UCCS), The Colorado College, New Mexico Tech, South Dakota School of Mines or Montana Tech. Scholarship recipient(s) must reapply each academic year as the scholarship is awarded on an annual basis and not the duration of the student's tenure at one of these colleges. Scholarship applicants must major in Mineralogy, Geology or some other field of the Earth Sciences.
- Award the scholarship to the American Federation of Mineral Societies if no local student can be selected.
- Give CSMS family members full consideration for the scholarship in the final review of all applications.

Any comments or suggestions should be directed to Kay Thompson at 636-2978.

Feldspar *Continued from page 1*

of feldspar found worldwide are clear transparent white, yellow, grey, brown, red and multi-colored.

Gem Feldspar

There are several species that can be cut as cabochons, faceted or carved. The three feldspars that come to mind are moonstone, sunstone and labradorite. Amazonite is sometimes cut as a cabochon, and, if cut close to the basal pinacoid, the perthite lamina produce a great schiller in the finished stone. Moonstone is a high-temperature orthoclase or sometimes albite with a white opalescence. Sunstone is orthoclase with micro plate-like inclusions of hematite oriented parallel to one another. Labradorite is a metamorphic mixture of two or more feldspar species producing the play of colors and schiller.

Names that no longer are valid species of feldspars

Plagioclase is a subgroup of sodic or combined sodic-calcic feldspars, not a species. Oligoclase and andesine are in between members of the plagioclase subgroup, not a valid species. Adulayia is a glassy orthoclase originally found in the Swiss Alps, but it's only orthoclase. Perthite is not a species of feldspar but an intergrowth or solid solution of microcline or orthoclase and albite. Labradorite, sunstone, and moonstone are gem names given to feldspars, not valid species as mentioned in the gem part of this article.

Size

Size of feldspar crystals vary from micros one-tenth of a mm from Ruby Mountain, Colorado, to those weighing over two-thousand ton from just south of the Kola Peninsula in Russia. The largest Colorado crystal I have seen is about two feet on a prism face; it's at Gold City and still in the pegmatite.

Here is a little information on all sixteen of the feldspar group members.

Albite, a sodium calcium aluminum silicate. Crystals are triclinic with many twin forms, contact, simple, and multiple laws. Albite is very brittle with a hardness of 6-6.5, and a major constituent of granites found worldwide.

Anorthite, a sodium calcium aluminum silicate, with short prismatic crystals twinning in the Carlsbad, manebach, baveno, pericline and albite laws. Anorthite is colorless in thin sections but can be white, grayish, or reddish as crystals. Found mostly in volcanic rocks such as Monte Somma and Vesuvius in Italy.

Anorthoclase, the midpoint of the so-

dium and calcium makeup between high albite and low sanadine feldspar. Twinning in the normal feldspar forms, with a hardness of 6, and perfect cleavage. Forms in high-temperature sodic volcanic rocks.

Banalsite, a barium sodium aluminum silicate. This little known feldspar is orthorhombic with crystal faces rare, found in metamorphosed mudstone, Lleyn Peninsula, Wales.

Buddingtonite, a monoclinic, ammonia feldspar found in compact masses and pseudomorphous after other feldspars. In the United States, it is found at Sulfur Bank Mercury Mine, Lake Co., California.

Celsian, a barium aluminum silicate. This feldspar is monoclinic and found as short prismatic or acicular crystals, also simple twins in the baveno, manebach, or carlsbad laws. U.S. occurrences are Franklin, New Jersey, and Fresno Co. and Mariposa Co., California.

Omisteinbergite, a calcium aluminum silicate. Hexagonal in crystal form, hardness is 6 and it's colorless. This feldspar was found in burned coal dumps in the Southern Ural Mountains of Russia.

Hyalophane, a potassium barium aluminum silicate. One of the transparent feldspars, it forms some of the best collector crystals in the feldspar group, with many twins and a vitreous luster. Hyalophane is found in metamorph manganese rocks with epidote, tremolite, rhodonite, and rhodochrosite.

Microcline, a triclinic potassium aluminum silicate. Colors include white, cream-yellow, red, green-blue (amazonite). Twins are carlsbad, baveno, manebach, albite and pericline laws. Microcline occurs in plutonic rocks such as granites, granite pegmatites, syenites and some hydrothermal veins. It is found worldwide, and locally is one of our most sought-after minerals.

Orthoclase, a monoclinic crystal with the chemical formula same as microcline. Temperature during formation is responsible for two crystal systems.

Paracelsian, a barium aluminum silicate feldspar. A monoclinic but pseudo-orthorhombic with wedge-shaped terminations, the twins are simple contact on prism faces. This feldspar has been found at Piedmont, Italy and Rhiw, Wales.

Reedmergnerite, a sodium boron silicate. It is colorless to tan or yellowish-pink. The crystals are triclinic, prismatic to platy, wedge-shaped with jagged terminations. Some of the locations for this feldspar include Ortero Co., New Mexico, Duchesne Co., Utah, and Kola Peninsula, Russia.

Continued on next page

Sanidine, a monoclinic potassium sodium feldspar. It is white to colorless, often transparent, crystals are usually small and have been found in many high-temperature environments including rhyolite, contact metamorphic and eclogite nodules in kimberlite.

Slawsonite, a strontium calcium aluminum silicate. It is monoclinic tabular and in radial groups. Found in Koch, Japan and the Wallowa Mountains of Oregon.

Stronalsite, a very rare feldspar with the

chemical composition of a sodium strontium aluminum silicate. It is orthorhombic, found in short prisms up to 1 mm, is white to colorless, and found in veinlets within serpentinite, Okayama Pref., Japan.

Svyatoslavite, another rare feldspar of secondary occurrence. It is a calcium aluminum silicate and in crystals to 0.8 mm. Svyatoslavite was formed as the yuselt of burning coal dumps at Kopeysk, Ural Mountains, Russia. 

HISTORY

A Florissant Fossil for the White City

Steven Wade Veatch

The "Big Stump" at Florissant Fossil Beds National Monument is one of the largest petrified stumps exposed in the Monument: it measures 3.6 meters tall and is 3.7 meters in diameter at breast height (Meyer, 2003). This solitary petrified stump (one of the largest in diameter on record) is all that remains of a tree that was more than 60 meters tall when a volcanic mudflow (lahar) buried its base during the late Eocene.

Big Stump is similar to the modern *Sequoia* (redwood) and is the type specimen described by Andrews in 1936 for *Sequoioxylon pearsallii*. An often confusing aspect of paleobotany is that different or-

gans (e.g., wood and leaves) that belonged to the same living species are preserved isolated and unattached in the fossil record. Therefore, it can be difficult to prove that they belonged to the same living species, and for that reason they are sometimes given different names as fossils. At Florissant, *Sequoioxylon pearsallii* is the name assigned to the fossil wood and *Sequoia affinis* is the name for cones and foliage. It is very likely that they belonged to the same species of tree when they were living, but this can not be proved unless these organs can be found attached in the same fossil. Philosophies

differ, however, and in 1953 MacGinitie placed *Sequoioxylon pearsallii* into synonymy with *Sequoia affinis*.

The Big Stump has been depicted in early photographs and postcards that date back to the late 1890s. Arthur Lakes, on an early expedition to the area with Samuel Scudder, marked the location of a "petrified forest" on his original water color map in 1878—the same general area where Big Stump is situated.

There was once a local effort to send



Figure 2. A broken saw blade remains wedged in Big Stump from an attempt to cut it into sections and ship it to Chicago for the World's Fair. Image date 11/2003, © by S. Veatch.



Figure 1. This postcard, ca. 1894, shows a wooden framework built around Big Stump. From the E. Simmons collection.

Clay Minerals in Medicine

The following short note appeared in *Rocks and Minerals* Vol 78 No 5 pg 361:

In the spring of 2004 the *Mineralogical Society of America (MSA)* met with the *Clay Mineral Society (CMS)* in Athens, Georgia. As expected, there were many research presentations about clay minerals or, more accurately, minerals of all sorts that happen to be clay-sized. Several sessions were on medicinal applications of minerals. Clays have been used in several ways in medical applications - poultices for infectious wounds, ingested to coat gastrointestinal linings, to absorb excess acid and toxins, to deodorize, or to kill parasitic worms. The healing mechanisms are unknown, and may be as varied as the illnesses. However, there was no lack of suggestions of how they might work. Clays are able to absorb and trap materials, including toxins, poisons, specific elements or radicals, dampness, or small organisms. When clays are eliminated or removed from the body so too is the offending materials. They have the ability (to) exchange elements, and control pH, oxidation state, or electrical potential of the immediate surroundings. If the healing mechanisms could be identified, then the most appropriate mineral or source locality could be used. Even better, minerals could be enhanced, modified, or even synthesized for maximum effectiveness. Basically they would be mineral medicines.

Mineralogical Society of America
1015 18th St NW Ste 601
Washington, DC 20036-5212 USA
Website: www.minsocam.org

Announcemnt

Members who have failed to pay their dues for the 2004 fiscal year will be cut from the Pick and Pack mailing list at the end of May.

Remember: Renewing members must pay the year's dues in its entirety regardless of which month they pay.

Continued on next page

Things to do

Saturday, May 8, Silent Auction of rocks, minerals, fossils, books, and related stuff, sponsored by the Colorado Mineral Society. Held at the Lakewood Link Recreation Center, 1295 S. Reed St. 1:00 to 4:00 p.m. For more info please call Bruce Geller, 303-237-2947.

Monday, May 10, Geologic History of Colorado and the Rocky Mountain Region, lecture at the Denver Museum of Nature and Science, 7 p.m., by Chuck Kluth, Distinguished Scientist, Department of Geology and Geological Engineering, Colorado School of Mines.

Thursday, May 13, "Zeolite mineralogy of the Table Mountains," talk by Dan E. Kile, USGS, at the bimonthly meeting of the Colorado Chapter, Friends of Mineralogy. 7:30 p.m. at Denver Museum of Nature & Science, VIP Room (enter museum at staff door to left of main entrance). All welcome. For more info, call 303-202-4766.

Friday, May 14, Silent Auction, sponsored by the Denver Gem and Mineral Guild. 7:30 p.m., Berthoud Hall (Geology Dept. building), ground floor, Colorado School of Mines campus (16th and Illinois St.); for info, contact Pete Neri, 303-674-2792.

Saturday, May 22, Silent Auction, sponsored by the Colorado Chapter, Friends of Mineralogy. 1-4 p.m., Glendale Community Center, 999 S. Clermont St., Glendale. All welcome. For more info call Bruce Geller at 303-237-2947.

References cited for:

A Florissant Fossil for the White City

Andrews, H.N., 1936. A new *Sequoioxylon* from Florissant, Colorado. *Annals of the Missouri Botanical Garden* 23 (3): 439-446.

Nitie, H.D. 1953. Fossil Plants of the Florissant Beds, Colorado. Carnegie Institution of Washington Publication 599:1-198.

Meyer, H.W., 2003. The Fossils of Florissant, Smithsonian Books, Washington, D.C., 258 p.



Figure 3. This ticket admitted the bearer into the World's Columbian Exposition in Chicago, a landmark event in American history and culture. From the Michele Veatch Collection.

this incredible fossilized tree stump to the World's Columbian Exposition (The Chicago World's Fair) of 1893. A plan was made in 1890 to remove the stump, transport it to Chicago by rail, and then rebuild it at the fair. Fortunately, the attempt to remove Colorado's prized fossil was unsuccessful. As it happened, the workmen's saw blades became permanently wedged in the fossil wood. The plans to send Florissant's famous stump to the Columbian Exposition were then quickly abandoned.

The World's Columbian Exposition, one of the greatest cultural events in the nineteenth century, was named in honor of Christopher Columbus and the 400th anniversary of his discovery of the New World.

Thousands were employed in the development of 633 acres of fairgrounds and the construction of 200 buildings at Chicago's Jackson Park. Many of the fair buildings were located along constructed waterways fed by Lake Michigan. The Court of Honor buildings (14 main buildings) were covered in white stucco. Visitors, after seeing these white buildings, began to call this the White City. After three years of plan-



Figure 4. View of the Colorado building at the World's Columbian Exposition. From the Michele Veatch Collection.

ning and building, and at a cost of twenty eight million dollars, President Cleveland opened the fair on May 1, 1893. Ticket prices were 50 cents for adults and 25 cents for children.

Visitors to the Columbian Exposition enjoyed more than 65,000 exhibits and attractions. The fair contained many marvels and introduced Americans and the world to picture postcards, carbonated soda, hamburgers, and a gigantic wheel (built by George W. Farris) that visitors could ride. The fair also introduced the nation to the Pledge of Allegiance, and brought a new holiday—Columbus Day.

Most of the states and territories had exhibits at the fair, including Colorado. The Colorado building had a wide variety of displays from the Centennial State. If



Figure 5. Fortunately, Big Stump did not make it to the White City, but remains for visitors to the Monument to enjoy. Image date 11/2003, © by S. Veatch.

Big Stump had been cut and quarried into sections, the Colorado building would have been a likely destination. Colorado day was celebrated September 12 at the fair without Big Stump—Colorado's famous fossil remained at the Florissant Fossil Beds, intact. Although Big Stump did not make it to the Columbian Exposition, it is probable that other Colorado fossils made it to the fair, perhaps even fossils from Florissant.

By its closing date on October 30, 1893, more than 27 million people had visited the White City. If Big Stump had been removed and displayed at the fair, this oddity of nature would have been lost. This magnificent fossil is now protected by the National Park Service, and visitors to the Florissant Fossil Beds National Monument can view Big Stump in its geologic setting.

See Sidebar for references cited.

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Letter Continued from page 1

April 30, 2004
 Pike National Forest
 Pikes Peak Ranger District
 601 S Weber St
 Colorado Springs, CO 80903

Dear sirs:

I wish to comment on the Gold Camp Road Planning/EIS Project.

I support the repair of Tunnel #3 and the opening of the closed section of the road to motorized traffic. The true historic value of this road cannot be fully realized unless it is restored to its use as a road that can be traveled by all people, not just the lucky few who can hike or cycle. It is time to stop this elitist trend toward making our national forests the playground of the most hale and hearty citizens.

I remember that the most vocal opponents of the last attempt to open the road in the late 1990's cited dust that descended on the Canonwoods community. Actually much of that dust comes from the still open section before Tunnel #3 directly above them. Possible endangered species were also cited. I dare say a determined wild plant or animal specialist could find something endangered anywhere they look within the forest, and usually do!

This particular closed section of the road is all part of the historic St Peters Dome Mining District that dates from the earliest surveys of minerals in El Paso county. Winfield Scott Stratton was a prospector here at the Eureka Tunnel (down slope from the #5 tunnel) before going on to Cripple Creek fame. A number of rare minerals found here are known from only one other locality, Greenland. I have a list of 52 minerals reported from this district that appeared in various papers and mineralogical publications. It should be remembered that none of this area is pristine in the true meaning of the word. Nearly all of the lands abutting the road were prospected by bulldozers in the 1940's and '50's.

In May, 2000, and again in July, 2003, I led field trips to this area using the keyed gate at the St Peters Dome end. Over 50 mineral collectors who had been unable to get to this area without hiking for great distances were able to spend one day here! Obviously, not all who would like to collect here are able to go on any single day. They should be able to go on their own when it fits their schedule, and to other sites along this portion of the road that we were unable to prospect.

It is also important that this road be available for fire fighting purposes. On my last trip there in July 2003, the lock had been jammed by driving a nail into the key slot and breaking it off. It is apparent that some of those opposing vehicular use of the road are eco-terrorists. On one visit to the area my front and rear brake lines were cut on my vehicle while I was prospecting above the road.

It is my hope the planning project now under way will not yield to those environmental extremists who work to lock up our public lands. As a member of the Pikes Peak Multi-Use Planning Group, we incorporated the vehicular use of the Gold Camp Road in our final plans, but this has not come about because of these extreme environmentalists using lawsuits to stymie the fulfillment of our plans. Please keep me informed of progress and I would like a hard copy of the draft EIS.

Sincerely,

Raymond R. Berry
rayber@peoplepc.com

No termination date for comments was given in the brochure I received from the Forest Service. Please give your views, and do not put this aside where it may be forgotten.



Editor's Note: The area above Gold Camp road is one of the most historic mineral collecting areas in the Pikes Peak region. Lazard Cahn did extensive research in this area, and some of the world's rarest minerals are found here. Don't let this area remain closed to access by our members.

The Friends of the Florissant Fossil Beds

Summer Seminar Series

The Friends of the Florissant Fossil Beds is pleased to announce their summer seminar series for 2004. At press time for the newsletter, the following dates and topics are set for this year.

For more details, please email Steven Veatch (President, Friends of the Florissant Fossil Beds) at sgeoveatch@att.net.

Steve will then send you an electronic version of the detailed seminar brochure that will soon be available. If you do not have email, call him at 719-748-5010 and give him your address. Many of these classes will fill quickly, so call or send Steve your email today.

Saturday, June 26, 2004

Kurt Fair, Paleo Indians to the Utes in Florissant

Sat. - Sun, July 10-11, 2004

Dr. Herb Meyer, Paleontology and geology of the Gold Belt

Sunday, July 18, 2004

Dr. Herb Meyer, Ancient Life and Landscape of Florissant

Saturday, July 31, 2004

Dr. Vince Matthews, Colorado Geology: Message in the Stone

Saturday, August 14, 2004

Dr. Bob Reynolds, Water

Saturday, August 21, 2004

Dr. Wayne Shepperd, Fire Ecology

Sat.- Sun., August 28-29, 2004

A group will present a seminar on Lewis and Clark.

Each seminar is one day long, unless otherwise noted (2 days). Graduate credit through Adams State College is available for teachers.

Cheyenne Mineral & Gem Society's May show

Cheyenne Mineral & Gem Society's May show will be held in the Holiday Inn located at 204 W Fox Farm Road, Cheyenne, Wyoming. Directions: Go east off of I-25 onto I-80, turn south at exit 362, turn right at the light on Fox Farm Road.

There will be dealers, fossils, gem stones, beads, rocks, lapidary supplies, wire wrapping, a gold panning demonstration, educational exhibits, mineral and lapidary displays, black light display, hourly silent auctions, and friendly people.

Saturday, May 15, 2004 9 a.m.-6 p.m.
 Sunday, May 16, 2004 10 a.m.-4 p.m.

Admission: Adults \$3
 Children under 12 years - FREE

For additional information, contact:
 Paul (307) 634-6773 .

Mother's Day in the Mining Camp!

Date: May 8, 2004; Time: 1:00 p.m.

Location: Western Museum of Mining and Industry (WMMI)

Program: Mother's Day in the Mining Camp!

Women have always been a driving force in the development of the American West. We'll celebrate Mother's Day at the Museum by learning about women in mining. Children will hear about how women worked, raised families, and made crafts in the late 1800's. Then they'll create their own "pioneer craft" to give Mom for Mother's Day.

Admission: Due to the generous support of the Colorado Mineralogical Society, the George M. White Charitable Trust, and Museum Members, Super Saturday admissions are only \$3 per person (CSMS & Museum members are always admitted at no charge!). Reservations are requested. Please call (719) 488-0880, or correspond by e-mail to specialprograms@wmmi.org.

Brad Poulson
 Public Programs Coordinator
 Western Museum of Mining & Industry
 Visit our web site: www.wmmi.org
 719-488-0880

**Rocks and Minerals:
 Windows into the Distant Past**

by Andy Weinzapfel, geologist

Today's popularity of forensic science TV shows like *CSI*, *CSI-Miami*, and *The New Detectives* taps into a deep human desire to discover through painstaking field observation, laboratory analysis, creativity, and logic those past events that are mysterious. If *Cold Case Files* can engage the viewer while twenty year-old crimes are solved, think of the excitement geologists feel when bits and pieces of the several hundred million to multi-billion-year-old earth puzzle fall into place.

While the Pikes Peak Historical Society is dedicated to enhancing the understanding and appreciation of human history, there is also an equally remarkable story of truly ancient history to be told by

the rocks of the Pikes Peak backcountry. Weighing in as old as 1.8 billion years, these rocks speak of earthquakes, catastrophic volcanic eruptions, inundations by the sea, extinctions of species, and other cataclysms barely imaginable by the human mind.

How do geologists understand the distant past? The evidence, first and foremost, is in the rocks. This Chautauqua presents a potpourri of guidelines and principles for the non-specialist regarding how to interpret rocks and minerals encountered during hikes in the forest. The goal of this mini-geology course is to develop some tools for understanding the history apparent in the rocks, and hence to develop an appreciation for the fascinating story they tell.

Come join us at 2:00 P.M., Sunday, May 16, 2004, at the new Florissant library for this free Chautauqua. Bring a friend. 

It's a Rockin World

Something tells me this crystal dig field trip is going to be VERY successful.



Copywrite: Ethan Bronner

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**Steve & Peggy Willman - Minerals
 Sangre de Cristo Gallery**

114 Main Street, Westcliffe, CO 81252
 email: gallery@ris.net 719-783-9459
 Fall Hours: Friday & Saturday 10:00 to 5:00

Collectable minerals, fossils, crafts & local artists

Board Meeting: 1st Wednesday @ 7:00
Bob Landgraf: 687-3195

Kaye Thompson will be hosting this month's meeting: 1830 Mesita Court, Colorado Springs. Drew: MapQuest it.

Camera Club: 4th Tuesday @ 7:15
1514 North Hancock, C/S
Roger Pittman: 683-2603

Camera Club met Tuesday the 27th. Competition was tough with excellent slides of birds. Eloise Berry won with a picture of a sparrow all puffed up against the cold. The Pittman's and the Wings tied for second place; Jack Thompson took third. Competition next month is wildflowers.

Crystal Study Group: 2nd Friday @ 7:30
1514 North Hancock, C/S
Kerry Burroughs: 634-4576

Still haven't set a date for the crystal group trip yet as Roger just set the date for the Penrose trip. The May Crystal Group Meeting is to bring your specimen for the crystal group case.

Faceting Group: 4th Monday @ 7:00
Dave Wilson: 635-7891

Faceting Group Meeting will be May 24 at Rick and Pat Olson's at 7:00. Their address is: 535 Hidden Valley Road. Everyone welcome. For information call David Wilson.

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

May Fossil Meeting is rescheduled for Naoko & Bob Murphy's at 7:30 on May 27th, 4130 Scotch Pine Drive in Briargate. She broke her leg skiing in February, but says it should be all right by then.

Lapidary Group: 1st Saturday @ 10:00
3085 Rhapsody Drive, C/S
Drew Malin: 531-7594

Lapidary group met on May 8th at Drew's Lapidary Workshop. Drew requested that everyone bring one or more lapidary pieces and cabachions for the CSMS Show official Lapidary Group case.

Micromounts: 2nd Tuesday @ 7:00
1514 North Hancock, C/S
Phil McCollum acc@frii.com
Moyra Lyne: 442-2673

The Micromount Group's new leader is Phil McCollum. Moyra Lyne will be assisting as the sub-group leader.

Jewelry Group: 3rd Saturday @ Noon-4:00
6608 Gambol Quail Drive East, C/S
Rick Copeland: 594-6293

The Jewelry club will meet on Saturday, May 15, from noon to 4:00 at Rick Copeland's house. This month's subject is work hardening and annealing. Bring silversmithing projects you want to work on.

President	Robert Landgraf	687-3195	RMLWP74@aol.com
Vice President	Drew Malin	531-7594	advanceone@adelphia.com
Secretary	Sidney Benda	488-9751	sid470@adelphia.net
Treasurer	James Bushnell	598-9262	bushy@pyramidpeak.com
Membership Secretary	Lorrie Hutchinson	382-3503	lorriehutchi@wmconnect.com
Managing Editor	Ethan A. Bronner	448-9949	CSMSpickANDpack@msn.com
Member-at-Large	Louis Severini	687-9491	
Member-at-Large	John White	630-0300	bluski2222@msn.com
Past President	Kaye Thompson	636-2978	
Show Chairperson	Manny Sanchez	495-7858	sandstonegemtec@msn.com
Field Trip Director	Roger Pittman	683-2603	roger_pittman@tmc.com
Librarian	Mary O'Donnell	689-7209	mod4185@compuserve.com
Camera Club	Roger Pittman	683-2603	roger_pittman@tmc.com
Crystal Study	Kerry Burroughs	634-4576	kburroug@adelphia.net
Faceting Group	Dave Wilson	635-7891	dlwilson@pcisys.net
Fossil Group	John Harrington	599-0989	harrington1@mindspring.com
Lapidary Group	Drew Malin	531-7594	advanceone@adelphia.com
Micromount	Phil McCollum		acc@frii.com
Jewelry	Rick Copeland	332-7915	rick.copeland@covad.net

Events

- 1 **May - Saturday, 12:00 PM**
Lapidary Group
- 5 **May - Wednesday, 7:00**
Board Meeting
- 11 **May - Tuesday, 7:00**
Micromount Group
- 14 **May - Friday, 7:30**
Crystal Study Group
- 15 **May - Saturday, Noon**
Jewelry Group
- 20 **May - Thursday, 7:30**
General Assembly
- 24 **May - Monday, 7:00**
Faceting Group
- 25 **May - Tuesday, 7:15**
Camera Group
- 27 **May - Thursday, 7:30**
Fossil Group
- 2 **June - Wednesday, 7:00**
Board Meeting
- 5 **June - Saturday, Noon**
Lapidary Group
- 8 **June - Tuesday, 7:00**
Micromounts Group

15-16 May - Sat & Sun
Cheyenne Mineral & Gem Society's May show. See sidebar on page 8 for more details.

19-20 June - Sat & Sun
CSMS Rock & Gem Show, Phil Long Expo Center. This year's theme is *Rockhounding: A Family Affair*. This year's mineral is Feldspar.

Ethan A. Bronner, Editor



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Joining the Colorado Springs Mineralogical Society (CSMS)

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

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

Yearly Dues include the 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 and Industry*, a year of learning and enjoyment, plus a lifetime of memories. Individuals - \$15.00 Family - \$25.00 Juniors - \$2.00

If you are interested in joining the 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 website: www.csms.us