

SHOW-ME ROCKHOUNDS

JULY 2005 NEWSLETTER

MEETINGS are held at the WESTPORT PUBLIC LIBRARY the 3rd Tuesday of each month at 7:00pm. The library is located at 201 Westport Rd. KCMO. There is parking on the side and in the rear of the library. Dues are \$10.00 per family and \$5.00 for individual memberships. Show-Me Rockhounds is a non-profit organization affiliated with the Association of Earth Science Clubs of Greater Kansas City, Inc. and the Mid-West Federation of Mineralogical Societies. Our purpose is to further the study and awareness of the Earth Sciences amongst our membership and the public.

OFFICERS: Marty Mueller President; Vice-President ????
Sharon Penner, Treasurer Secretary & newsletter Carol Fergason.

PRESIDENT'S MESSAGE:

July is now a stepping stone for us. As with many clubs; July was a month to skip. Beset with vacations and summer heat both July and August were considered skip months on most club calendars. Our July meeting is 39 days away from the Association Picnic with its new rock swap. For me, the “what” of the swap I know. It is the “how” to have the swap that has me scratching my head.

The Association will foot the bill for postcard mailings, do we design the postcards? I also wonder if there are ground rules to be set out, any limits? Should we have a simple mission statement hoping for a swap with the “win-win” mentality? Can clubs set up fund raising tables with silent auctions for everyone invited to bid? Is there any thought to inviting clubs from out side our metro association?

Please think about the first rock swap of this millennium, we want a good swap, a chance to bring out dusty rough and trade it or sell it while trading or buying the material you want to have or work with. See you at the meeting! Martin.

JUNE Meeting Minutes:

There were only 4 of us at the June Show Me meeting—Linda Leake, Ray Rutledge, Stu and me. The current balance in the Show Me treasury is \$1,328.56 We had a very interesting discussion about geology. Ray is a petroleum geologist and he related some interesting information regarding his work.

I gave some of the highlights from the Association meeting. The show hours were changed to: 9AM to 9PM Friday, 9AM to 7 PM Saturday (Auction afterward as always), 10AM to 5 PM Sunday. As yet I don't know the exact show dates. Mr. Bones will be asked back for the 2006 show. David Wright, Bruce Stinemetz and Nancy Horton volunteered for the treasury audit committee. They will have a report at the September 8 Association meeting. The 2005 Gem & Mineral Show made around \$5,900 even though attendance was lower this year. This was due to cost cutting and selling part of the space to Ed Tripp.

The Association voted FOR our PICNIC/SWAP package deal. The **picnic/swap** will be held on **Sunday, August 28, 2005 at Antioch Park, Shelter #3**. I have made and paid for the reservation for the park. We have the area from 8 AM to 10 PM. The Show Me club will be responsible for publicizing and setting up and the swap. The Association will print and pay for the flyers. They will also pay for the meat, drinks and utensils as in the past. Bruce will buy the food and bring it to the picnic as before.

The Show Me club is responsible for making the flyers (I could do one if you would like now that I have all of this new graphic capability) and distributing them to the various clubs. We may have to give flyers to some individual in each club who will be responsible for mailing them out to their members. Do you have any ideas on distributing the flyers to each club? At the Association meeting Charlie said that swappers should **BYOT (bring your own tables)**. We will probably have to have some one at the park at swap set up time.

I finally received an AFMS Newsletter. The Midwest/AFMS meeting is August 16-21, 2005 in St. Louis, MO. Linda Leake brought some information on Guided and Self-Guided Field Trips during the show from the website.

The AFMS Newsletter contained some interesting website info. Although the article mentioning these sites was geared to children, most of the web sites are for all ages. Following are the web sites mentioned. **FOSSILS** www.isgs.uiuc.edu/dinos/ www.paleoportal.org
MINERALS & EARTH RESOURCES www.usgs.gov www.mii.org and
www.womeninmining.org www.theimage.com

LAPIDARY ARTS www.rockhounds.com Socrates.berkeley.edu/~eps2/
www.tradeshop.com/gems/

MUSEUMS

www.lib.washington.edu/sla/natmus.html

www.amnh.org/education/resources/ (contains activities and resources for elementary through high school. Lessons on minerals, meteorites and various aspects of paleontology)

Many Thanks to Sharon for the June meeting minutes and information!!

Calendar of Events:

August 19-21----AFMS/MWF show with the St Louis Association of Earth Science Clubs will be held at the Greensfelder Recreation complex in Queeny Park on 550 Weidman Rd. More to come....

Email article sent from Bob Loeffler North Jeffco club:

SWEETWATER STATION, Wyo. -- The scattershot markers of different sizes and colors stand out among the sagebrush with nothing more than a lonely, sauntering wild horse as far as the eye can see. Over here is a 4-by-4 stake spray-painted pink and yellow on the top with rocks painted the same colors at its base. "Giddy Up and Go 3-4-05" is written in black marker on one side. Bird droppings mark the flat top of the post. Over there is another stake, bearing a clipboard bound with duct tape; written on the board: "2 claims Total Size 200 yds x 500 yds." Across a dirt-and-gravel road is a 2-by-4 stake, with "Discovery Cor {nldr}23" written on two sides. A plastic freezer bag is attached near the top with duct tape. Inside is a folded document that describes the claim's dimensions.

The markers are monuments to a 21st century rush of prospectors. They descended on this remote, hilly area in south-central Wyoming last March with grand hopes and dreams of striking it rich by finding a precious gemstone called opal. The rush caught federal officials off guard, resulted in a bureaucratic paper jam that has delayed actual mining and prompted authorities to take measures to protect an endangered flower from being trampled.

Opal is considered the most colorful of all gemstones, and the best opal gems are more valuable than diamonds, fetching up to \$10,000 a carat, according to the International Colored Gemstone Association.

The Wyoming opal site -- a three-square-mile area about 100 miles west of Casper -- was initially discovered by a local rockhound who told the State Geological Survey, which undertook a more extensive survey and found large deposits of opal. Most of the opal is "common opal," which isn't worth much. But geologists found some of the highly valued "precious opal," leading them to conclude that there was more to be found.

Fremont County Clerk Julie Freese said her office received 1,048 mining claims over a nearly two month period after the State Geological Survey publicly announced the exact location of the opal deposit. Each claim cost \$135 in fees.

"I thought it would be more; it didn't seem too bad a price," said Jim Montgomery of Cheyenne, who along with a partner staked out two claims -- named "Mother Lode" and "Lucky Strike" -- for a total of \$270. "We went up and kind of picked around a little bit, but didn't find anything too exciting yet," Montgomery said.

Unlike the gold rushes of Old West lore, these new prospectors aren't allowed to begin digging until their paperwork is properly filed with the state and the U.S. Bureau of Land Management, which manages most of the land where the opal is located. So far, the Wyoming BLM office in Cheyenne has received only 50 of the 1,048 claims. And even among those 50, most lack the proper legal description in order to be accepted, further delaying the digging.

"They'll all be getting letters asking them to correct the legal description," said Pam Stiles, a land law examiner with the BLM.

While the paperwork has put a clamp on actual digging for now, the rush to the 1,680-acre area certainly wasn't lacking for adventure, surprise and some comic relief.

The BLM was caught off guard because the State Geological Survey kept the exact location of the deposit secret until a public announcement March 4. Jack Kelly, manager of the BLM office in Lander, had to call in help from other BLM offices around the state to handle the onslaught of prospectors.

W. Dan Hausel, a state geologist in charge of metals and precious stones, said the state office didn't want to chance a leak that would have given some prospectors an unfair head start and didn't anticipate environmental problems because an oil field is located in the same area. But the BLM was forced to restrict vehicles on 360 acres in the area because some prospectors were driving off roads and endangering the desert yellowhead, a sunflower-like plant listed as threatened under the Endangered Species Act. Some deep wheel ruts were gouged into the ground.

"It was quite a rush, and 99 percent of the people I talked to had no idea what they were doing, so it was pretty entertaining," Hausel said.

Some people ended up miles away from the opal because "they didn't know how to read a map," he said. Many had no clue about mining regulations and how to stake a claim. Kelly said he expects prospectors to start digging on their claims this summer and into the fall before winter forces a halt.

For prospectors like Montgomery, who described himself as a casual rock collector, the digging can't start soon enough. "We kind of can't wait to get up there," he said.

On the Net: Wyoming State Geological Survey: <http://www.wsgs.uwyo.edu/>

Wyoming BLM: <http://www.wy.blm.gov>

International Colored Gemstone Association: <http://gemstone.org>.

Wyoming opal rush causes headaches for federal land managers

By Bob Moen / Associated Press

Email article from Rolland:

Are you ready for "Deep Impact Comet Encounter"?

NASA ANNOUNCES SPECTACULAR DAY OF THE COMET After a voyage of 173 days and 431 million kilometers (268 million miles), NASA's Deep Impact spacecraft will get up-close and personal with comet Tempel 1 on July 4 (EDT). The first of its kind, hyper-speed impact between space-borne iceberg and copperfortified probe is scheduled for approximately 1:52 a.m. EDT on Independence Day (10:52 p.m. PDT on July 3). The potentially spectacular collision will be observed by the Deep Impact spacecraft, and ground and space-based observatories. "We are really threading the needle with this one," said Rick Grammier, Deep Impact project manager at NASA's Jet Propulsion Laboratory, Pasadena, Calif. "In our quest of a great scientific payoff, we are attempting something never done before at speeds and distances that are truly out of this world."

During the early morning hours of July 3 (EDT), the Deep Impact spacecraft will deploy a 1-meter-wide (39-inch) impactor into the path of the comet, which is about half the size of Manhattan Island, N.Y. Over the next 22 hours, Deep Impact navigators and mission members located

more than 133 million kilometers (83 million miles) away at JPL, will steer both spacecraft and impactor toward the comet. The impactor will head into the comet and the flyby craft will pass approximately 500 kilometers (310 miles) below.

Tempel 1 is hurtling through space at approximately 37,100 kilometers per hour (23,000 miles per hour or 6.3 miles per second). At that speed you could travel from New York to Los Angeles in less than 6.5 minutes. Two hours before impact, when mission events will be happening so fast and so far away, the impactor will kick into autonomous navigation mode. It must perform its own navigational solutions and thruster firings to make contact with the comet. "The autonav is like having a little astronaut on board," Grammier said. "It has to navigate and fire thrusters three times to steer the wine cask-sized impactor into the mountain-sized comet nucleus closing at 23,000 miles per hour."

The crater produced by the impact could range in size from a large house up to a football stadium, and from two to 14 stories deep. Ice and dust debris will be ejected from the crater, revealing the material beneath. The flyby spacecraft has approximately 13 minutes to take images and spectra of the collision and its result before it must endure a potential blizzard of particles from the nucleus of the comet. "The last 24 hours of the impactor's life should provide the most spectacular data in the history of cometary science," said Deep Impact Principal Investigator Dr. Michael S. A'Hearn of the University of Maryland, College Park. "With the information we receive after the impact, it will be a whole new ballgame. We know so little about the structure of cometary nuclei that almost every moment we expect to learn something new."

The Deep Impact spacecraft has four data collectors to observe the effects of the collision. A camera and infrared spectrometer, which comprise the High Resolution Instrument, are carried on the flyby spacecraft, along with a Medium Resolution Instrument. A duplicate of the Medium Resolution Instrument on the impactor will record the vehicle's final moments before it is run over by Tempel 1. "In the world of science, this is the astronomical equivalent of a 767 airliner running into a mosquito," said Dr. Don Yeomans, a Deep Impact mission scientist at

JPL. "The impact simply will not appreciably modify the comet's orbital path. Comet Tempel 1 poses no threat to the Earth now or in the foreseeable future."

Deep Impact will provide a glimpse beneath the surface of a comet, where material from the solar system's formation remains relatively unchanged. Mission scientists expect the project will answer basic questions about the formation of the solar system, by offering a better look at the nature and composition of the frozen celestial travelers we call comets.

The University of Maryland is responsible for overall Deep Impact mission management, and project management is handled by JPL. The spacecraft was built for NASA by Ball Aerospace & Technologies Corporation, Boulder, Colo. For more information about Deep Impact on the Internet, visit: <http://www.nasa.gov/deepimpact> .

The Rock of the Month

A few months ago, someone at our rock club meeting came up to me and asked, "Why do you do the Rock of the Month?" The best answer to this question is with a story about one of our field trips to a mine in the Kentucky fluorite district.

We were accompanied by one of our club members who is a consummate Micro and Rare mineral collector. He informed us about some of the minerals that have been recovered from this site, including fluorite, Galena, Sphalerite, and a rare Smithsonite.

While everyone was working at the main mine site, I happened to wander into some nearby woods and found a collapsed mine shaft surrounded by waste rock. Looking around I spotted a large rock with what appeared to be a hole in it. Upon closer examination the hole proved to be a vug surrounded by a nasty yellow calcite and filled with violet fluorite cubes. The largest cube appeared to be 1 ¼ square. But what to do? The rock was far too large to roll let alone carry back to the truck. Although my hammer and chisel skills have improved over the years, I'm still not what you would call "good at it", and I was afraid that I would damage the specimen. However, time was limited so there wasn't any option but to make the attempt. The specimen was fragile, so working as carefully as possible I slowly removed as much of the "calcite" as I could to open up the vug. Then chiseling a groove around the specimen, the rock finally split, leaving the specimen intact, undamaged, and small enough to carry.

Every one was already gathering back at their vehicles when I came in carrying my prize. After collecting all the Oooooos and Ahhhhs of my fellow rock hounds I showed the specimen to our club Mineralogist. His comment was "WOW LOOK AT ALL THAT SMITHSONITE". I had chiseled away a rare specimen of Smithsonite, just to get a better look at the fluorite! So that's why I do the rock of the monthevery month. Ted Ferguson

Under My Radar

A co-worker gave me the June 20th, Kansas City Star after I got back from Colorado Springs. Front page news was the Riverbluff Cave; I found the piece very interesting. As far as I know it was the first time I'd heard of it and glad to see it on the front page plus it had an internet address for more information. Well after two hours of searching the KC Star's site for more, I went to Charley and she used the Google search engine. Google came up with the main site in addition to different newspaper articles. I have now used Yahoo and it has pulled up a like amount of sites for Riverbluff Cave.

The Riverbluff Cave has several chapters; first is the formation of the cave, second is the use of the cave by prehistoric animals with the deposit of clays and bones and the third chapter is the discovery of the cave.

The discovery was aided by the temporary moratorium on the use of explosives after the terrible attack of 09-11-2001, which halted further blasting of the bluff for widening the highway south of Springfield. As the dust settled after the first two blasts the cave was found, if there had been more blasting the cave may have collapsed. I hope that everyone has access to the website, not just for general story but the information about the tests the researchers are using to date the bones they find. The dates so far in the research go back 500,000ybp and some of the researchers are looking for a million year past for the deposit of the earliest clays. That makes this cave special due to having the oldest fossils yet discovered in a cave environment. Please have a look and see what you think, start your search with Riverbluff Cave. Martin.