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Sent: Sunday, February 06, 2005 4:29 PM
To: Azland61@aol.com
Subject: Mineralogical Society of Arizona - February 05 Newsletter

Hello all - The following is the newsletter for February 2005. I'm sorry it is going out late (and in this format), but my computer is not playing nice. Hopefully, it will be fixed in time for the next newsletter.

Check out the upcoming field trips & remember that our meeting is on the 3rd Friday this month (because of Tucson).
Bye, Deanna Smith (editor)

Mineralogical Society of Arizona
The Rockhound Record
February 2005 , Volume 7, Issue 2

**Our Next Meeting is on
Friday, February 18th at 7 pm
at the Arizona Mining & Mineral Museum**

The presentation will be given by Les Presmyk. He will speak about Phelps Dodge's mineral collection which is housed at their headquarters.

Need to contact the Board?

President - Shirley Fiske phone: (623) 551-0882
email: ShirleyAF@aol.com

Vice-Pres.- Gilbert Flores phone (800) 264-5101
email Gilbert.Flores@encompassins.com

Treasurer - Sally Fiske phone (623) 551-0882
email: xmasbelle@aol.com

Secretary - Lois Splendoria
email: chimes@extremezone.com

Need to contact the newsletter editor?

Write to Deanna Smith
P.O. Box 14405, Phoenix, AZ 85063
or email azland61@aol.com

Sister Club for the
Mineralogical Society of Arizona ? ? ?

The Rocky Mountain Federation President, Judy Beck, is starting a RMFMS sister club program and has asked if we would like to participate. She has suggested the Topeka Gem & Mineral Society of Topeka, Kansas as our sister club.

For starters we could exchange newsletters, and swap mineral specimens from our respective areas. Let's discuss this possibility at our February meeting.

The Topeka club's website can be viewed at <http://www.people.ku.edu/~stalder/>. Their email is stalder@ku.edu.

\$ \$ \$ Dues are due \$ \$ \$

Mail your 2005 dues to Sally Fiske, 42011 N. Astoria Way, Anthem, AZ 85086.

Junior (Under 18) = \$2.50 Single = \$12.00 Couples / Families = \$20.00

President's Message by Shirley Fiske

Hello, Everyone!

Well, we survived yet another club show. While I'm sure Gilbert will be giving you his own thanks, I would like to personally extend my thanks to all club members who helped make the recent Rockfest a success. That includes all of you who helped in the setup and tear-down, along with those of you who helped during the show. While I would have liked to have seen more of you participating, those of you who were there did a fine job. Many thanks.

It was exciting to see all the names and e-mail addresses of people who signed up to receive our newsletter on the Internet. I hope this leads to people coming to our next meeting to "check us out." I know they'll find a group of individuals who meet to "talk rocks", find out about the latest news in the mineral field, and hear a great lecture from a knowledgeable speaker. You and I know we're wonderful people, but let's make sure our visitors feel welcome too. This show is a wonderful opportunity to introduce the MSA to those in the valley who may not have heard of us. Let's make the most of it. See you on Feb 18th.

Minutes from January's Meeting By Lynne Dyer

Gilbert thanked those who helped with the show's setup and reported on how the first day of Rockfest went. He said that the rock roulette wheels had done well.

Shirley Fiske discussed upcoming meetings and reminded us that February's meeting will be on the third Friday because of the Tucson Show. The Tucson show will highlight minerals from China. It was also mentioned that there will be a special mineral show at the Clarion Hotel on Broadway & Alveron. The field trips were also discussed.

Sally Fiske gave the treasurer's report. She also reminded members to pay their dues. Cookies for the meeting were provided by Marc Watson. Many thanks to Marc!!!

Our speaker was Stan Celestian. Stan is a professor at Glendale Community College in the Physical Sciences Dept. His wife, Susan, is the Arizona Mining & Mineral Museum's curator. His topic was "The Celestian Family of Minerals". He spoke about how he first became interested in collecting minerals. After taking an earth science class with some friends, he decided to enter the earth science field. He told about some of his favorite collecting sites in his younger years.

He showed many beautiful slides of minerals that he had collected over the years at various Arizona mines, as well as recent acquisitions to his collection. He frequently asked the audience if they could identify the minerals shown on the slides, and Jeff Scovil knew them all-including the localities! Stan has a good sense of humor and is a superb speaker. Many thanks to Stan!!!

The door prizes were given out and the meeting was adjourned.

**Dan Helms' Passing - An Epitaph
By Pierre Cantou**

MSA President, Shirley Fiske, announced at the January 14, 2005 Regular Meeting that our friend and long time mineral collector, Dan Helms, had died of complications of diabetes in the Veterans' Hospital, Phoenix, Arizona this January.

Dan had been a MSA member for 45 years and was a well known field collector specializing in minerals from Arizona sites. His children, Dallas and Casandra, formerly also were MSA Juniors and accompanied him on many expeditions. Dan was a volunteer at the Arizona Mining and Mineral Museum and donated a number of his finest Arizona mineral suites to grace the displays and collections there.

We all are indebted to Dan for his contributions to the Museum and for the help he gave and shared with us from his firsthand knowledge of the underground workings of innumerable Arizona mines and prospects visited and collected at by him. Particularly both at the Fat Jack Mine, on Lone Mountain, south of Crown King, and at the famous Date Creek Ranch site, both in Yavapai County, Arizona. Extraordinarily fine suites of these sceptered crystals on matrix were obtained by him and examples of which he donated to the Mineral Museum.

It was primarily through his initiatives and sharing these discoveries and rediscoveries with other fellow mineral lovers and rockhound acquaintances near and far that many of us subsequently have been inspired to follow in his footsteps in collecting at and visiting these and innumerable other Arizona sites.

The next time you visit the Mineral Museum, take the time to look up some of the outstanding specimens Dan collected and donated so we and all future generations of persons can see them too. And remember the Helms family in your thoughts and prayers as you do so. Our heartfelt sympathies go out especially to Dallas and Casandra.

**Swapping Materials by Michael Kessler
EFMLS Region II Vice President**

I would like to find people interested in trading specimens through the mail. The plan is to have a club, or a member, pack a box with self-collected mineral specimens, labeled and ready to travel. The total weight should be as close to ten pounds as possible. When your package is ready for mailing, contact me for the address to be placed on your package and I'll give your address to those mailing theirs out. I have two boxes waiting from New York, New Jersey and Pennsylvania. See if someone may be interested, and let me know.

Specimens such as these, could be used for prizes, raffles or auctions. Remember to inform those involved that the specimens should be cushioned for travel, and should be of a quality that they would also like to receive. I am only accepting boxes from members of AFMS Clubs. Anyone interested, please contact:

**Michael Kessler 4 Longfellow Road
East Stroudsburg, PA 18301
email quartz7228@aol.com**

**Field Trip -- February 26th & 27th
to Purple Passion & Monarch Mines**

Since the Purple Passion has a claim on it, there is a \$10 fee for collecting here. Check the owner's website <http://www.fluorescents.com/> for info on the Purple Passion which has fluorescent material. The Monarch has copper minerals.

When:

Feb. 26th & 27th - Come for Saturday only or camp with us for the weekend. Meet us on Feb. 26th between 9 & 9:30 a.m at the McDonalds in Wickenburg. We will head out at 9:30 a.m. For those who might be running a bit late, we will stop shortly at the geode location along Constellation Rd. before heading to the mines.

Where:

Saturday: To the Purple Passion and Monarch Mines on February 26th with a short pit stop at the small geode location on Constellation Road before heading to the mines. We will meet at the McDonalds in Wickenburg at Hwy 60 & Constellation Rd. Look for the sign reading "MSA Field Trip" & a dark blue Jeep Wrangler parked in the parking lot on the east side of McDonalds.

Sunday: On Saturday Bill Gardner, the Purple Passion's owner, will escort some of us who will be staying overnight to Amethyst Hill which is a short distance from his mine. We will go back on Sunday to this location & possibly some others.

Vehicles: Any 2WD vehicle with high clearance can make it to the Purple Passion, but you will need 4WD to get to the Monarch.

What to bring: A black light if you have one. Bill Gardner will also bring one of his. We will be staying until evening on Saturday so we can fluoresce our finds in the dark. Bring your usual rockhounding tools, plus heavy hammers/prybars. Bring your camping gear if you are staying overnight and food/water.

For more info contact Deanna Smith at azland61@aol.com or call (623) 869-3915 M/Th

**Field Trip to Hackberry Caldera
Saturday, February 12, 2005**

Trip leader: Tom Horton
Email# TOMGERRY1@MSN.COM
Phone# (623) 214-6110

Two locations, excellent scenery. Meet at McDonald's in Camp Verde at 10:00 am.
Depart at 10:15 am.

Fun Rocks Trip: any car can make it; much multicolored agate in volcanic caldera.

**Preview of March 26th & 27th
Field Trip to Saddle Mountain
Trip leader: Ed Nichols**

More details & map will be in March bulletin

High clearance or 4WD vehicle recommended.
Saddle Mountain is an old and well-known fire agate location. Other material: desert roses and some mine dumps, and some rare geodes.

Come for the day or (dry) camp overnight.

Activity Calendar - shows/trips/lectures

February 10 - 13, 2005 Tucson
Tucson Gem & Mineral Show -
Tucson Convention Center, 260 S. Church Ave
Hours: Thur-Sat. 10 am - 6 pm/Sun. 10 am- 5 p.m.
Admission: \$6.75, kids under 14 free w/adult
Parking: \$4.00 to \$5.00

* * For a listing of the many shows occurring in conjunction with the Tucson Gem and Mineral Show, see - <http://www.tucsonshowguide.com/>"

February 11-13, 2005 Wickenburg
54th Annual Gem & Mineral Show Sale
Wickenburg Community Center, 160 N. Valentine
Hours: Fri., Sat. 9 a.m. to 5 p.m., Sun. 10 a.m. to 5
p.m. Admission & Parking: Free

February 19, 20, 2005 Apache Junction
Apache Junction High School, Ironwood &
Southern, (one block N. of US 60 at Ironwood)
Hours: Sat. 10 a.m.- 5 p.m., Sun. 10 a.m. to 4 p.m.
["http://www.apachejunctionrockclub.org/"](http://www.apachejunctionrockclub.org/)
Admission: Adults \$2.50 Children under 12 free.

February 19, 2005 Phoenix
Prospectors Day at Arizona Mining and Mineral
Museum, 1502 W. Washington, Phoenix
Gold panning demo, panning equip, and childrens
activities. Hours: 10:00 a.m. to 4:00 p.m.

February 26th & 27th Wickenburg
Field Trip to Purple Passion and Monarch Mines - see page 4 for details.

March 4-6, 2005 Mesa
Phoenix Gem & Mineral Show
Mesa Centennial Center, 201 N. Center St., Mesa,
Sponsored by: Maricopa Lapidary Society
Admission: \$4.00, \$1.00 off coupon available at the Ariz. Mining & Mineral Museum,
1502 W. Washington, Phoenix. Parking: Free Hours:
Fri. 10 to 5, Sat. 10 to 5 p.m., Sun. 10 to 4 p.m.

March 18, 19, 20, 2005 Cottonwood
Annual Verde Valley Gem and Mineral Show
Mingus Union High School, 1801 E. Fir Ave
Sponsored by: Mingus Gem and Mineral Club
Hours: Fri. & Sat. 9 to 5 p.m., Sun. 10 to 4 p.m.
Admission: Friday - \$1, Sat. and Sun. - \$3:00, 3 day pass \$5.00, children under 12 free

March 30-April 4th Yuma County Fair
Yuma Gem & Mineral Society exhibits in fair. March 30th – April 2005. Contact Wes
Riley, 10657 S. Ave. 9E # L1, Yuma, AZ 85367, 928-305-6299

**Friends of Mineralogy, Colorado Chapter; Colorado School of Mines Geology
Museum; and USGS
are cosponsoring a mineralogical symposium on :**

Agate and Other Cryptocrystalline Quartz

Sat.-Sun., Sep. 10-11, 2005

(the weekend before Denver Gem & Mineral Show) at the Green Center, Colorado School of Mines, in Golden, CO

2 days of lecture presentations, Saturday evening banquet reception and tours of CSM Geology Museum, field trips to Colorado

mineral localities, Mon./Tues., Sep. 12-13

registration fee \$40

If interested in attending and receiving more info on the symposium, please send your name, address, and phone # and/or email address to: Friends of Mineralogy, P.O. Box 5276, Golden CO 80401-5276. Or email pmodreski@usgs.gov

**Rockfest 2005 – Here and Gone
By Gilbert Flores, MSA Show Chairman**

Thank you all so very much for your help with making MSA's involvement in Rockfest a success.

Help provided by MSA members who operated our activities was immeasurably valuable. We almost didn't have enough personnel to keep all of our activities open for the kids and adults to enjoy, but with the help of some very dedicated individuals who were there to help out all 3 days, we made it! Hopefully, the fruits of our hard work will pay dividends. A big push this year was to find people interested in the MSA. We had over 200 individuals who wanted more info about the MSA sign up at Rockfest for an e-mail or snail mail of our bulletin. We already have two new members as a result: Welcome Phil and Beverly Webster. They are interested in metals and prospecting.

We had tremendous exhibits – especially educational – and the winners were all deserving of their awards. Great job Shirley on the displays. With next year's theme being Psychedelic rock, things should be looking FAR OUT.

The Roulette Wheels were where the action was. It was evident that kids love rocks – and gambling. The most gratifying moments are seeing how excited kids (and some adults) are about rocks. Some even like beanie babies (Thank You Shirley and Sally). I greatly appreciate the efforts of our members with the wheel and especially Bob, Gil and Cecilia for being there all 3 days.

This year's show appears to have been a success on all but one level. The crowd's were good, but they were still light. Except for the school program, we would have had fewer attendees than last year. We have had more media coverage than ever and a greater amount of outside support.

WR Russ must be congratulated on the success he had with participants, media coverage and sponsors. Without these sources' dedicated help and the outstanding effort of the FRY'S volunteers, this year's show would not have been the success that it was.

WR and I are already preparing for next year's show – and discussing improvements for next year. Some of the issues from last year's show were addressed, some were not. We are striving to improve every year and we've received a tremendous amount of positive feedback.

I ask everyone to give a thought to being on the show committee for Rockfest 2006 – Psychedelic Rock.

Thank You All, Gilbert

Some Upcoming Trips Gilbert Flores will lead:

March 19 to Date Creek for Quartz Crystals.

Take U.S. 60 to Wickenburg & meet at the Mc Donald's at 9:00 a.m. It will take 1-1/2 hours from the West valley and 2 to 2-1/4 hours from the East valley.

April 16: Bagdad Mine Copper Minerals

2 hours from the West valley and 2 to 2-1/2 hours from the East valley. Take US 60 through Wickenburg to Bagdad turnoff. Meet at the mine entrance, 9:00 a.m Phelps Dodge is offering us the opportunity to tour the open pit, the ball mill and to collect. Bring pick, sledge and chisels just in case we get to really bust rocks.

LIMITED TO THE FIRST 22 PEOPLE TO SIGN UP.

If we have a large response, we will then get a bus, then all are welcome.

The Mother Lode – Part 6: Primordial Riverbeds By Tom Horton

During the early 1850s there were many areas in which fortunes were being made in the Mother Lode, all of them supported by the gold coming out of the ground and recovered on the banks and bottoms of the various rivers and streams running through the area. All sorts of enterprises around San Francisco and other towns were springing up. Some of these were banking, merchandising, transporting goods, animals and people, carpentry. Construction lumber seemed to be in demand everywhere. Toll roads, toll bridges and toll ferries were more prevalent even than toll gates on today's high speed highways. Although these all prospered, most new comers to the area were interested in finding their fortune in gold.

The methods of recovering gold to this point were placer mining (panning, Long Toming and sluicing) and hard rock mining. During this time frame a "new, bigger, better and more destructive" method of mining was invented.

With the enormous influx of miners into the Northern Mines area centered around Nevada City, Dutch Flat and Grass Valley and extending from about Oroville on the north and Coloma on the south, it did not take very long for every square inch of likely looking stream and river bank (in some cases the stream and river bottom themselves) to be occupied by miners recovering gold. As a result, newcomers to the area began to prospect away from the streams and rivers back into the foothills of the Sierra Nevada. They discovered seemingly disconnected areas of gold bearing gravels in dry valleys and on the sides and the tops of the hills themselves. It was as if some sort of continuous gold bearing and buried gravel deposit had been sliced through somehow and thereby laid bare. It was "finders-keepers" again and claims were established sometimes a considerable distance from flowing water.

Dams were built on the various streams and rivers upstream of mining areas without regard to claims downstream from the dams; remember no inter-mining district regulation and no organized law enforcement yet existed. Thus we have the basis for many, many Hollywood movie plots. In any case, the lakes backing up behind the newly constructed dams produced a source of downstream water for a very elaborate network of aqueducts and artificial water channels used to bring the water "for a fee" to otherwise dry, gold deposits. These structures were made out of wood cut down and milled in the area. Wooden aqueducts spanned any number of obstacles following markers laid out by surveyors. Since this kind of thing is very capital intensive, water companies sprung up to provide the money needed with the accompanying issuance of stock and money flowing in from investors all over the world. Thus was water brought into otherwise dry claims and used to operate the ubiquitous long toms and sluice boxes.

Meanwhile, crews of miners were using pick, shovel and whatever to bring the gold bearing gravels to the long toms. Miners would dig down into the gravel deposits and bring out gold bearing gravel using rope windlasses. They would also dig side tunnels into deposits where it seemed warranted, risking hazards such as stale air, extremely poor working conditions and the ever present danger of cave ins. These holes dug into gold bearing gravel were called "coyote holes". They exist everywhere in the area around Nevada City and Grass Valley where they have not been filled in.

One afternoon, about seven miles north of Nevada City, some miners were applying their talents to a 200 foot high cliff side of gold bearing gravel using the coyote hole technique. The cliff collapsed. The miners narrowly escaped serious injury and a light went on in the mind of one of them. Why not use the force of water to bring down the gravel bearing cliff sides, break up the gravel chunks thus produced and wash the result through the long toms and the sluices? "Now we are getting somewhere" (Jacques Cleuseau; "The Pink Panther"). Formerly a sail maker, this creative miner patched together an eight inch hose about a hundred feet long from pieces of canvas, attached one end to the flume, fashioned a crude metal nozzle on the other end and invented the method of hydraulic mining (I.e. "hydraulicking").

The single ply canvas hose that he was using was an immense advance over the coyote hole methodology, but soon gave way to four ply canvas hoses, tipped with metal nozzles and attached firmly to covered and contained water conduits leading from the mining site to water reservoirs up to seventy miles away from the mining site.

Inventors north of Nevada City came up with the idea of extending the small metal nozzles to perhaps ten feet long and attaching a mounting base capable of traversing up and down and sideways (like an anti-aircraft gun from World War II) with a rock filled box counterweight to allow easy operation of this "water cannon" and a suitable lever to point the thing. A single miner could "point" and "shoot" the thing. These were called "Monitors". The first ones were made in Nevada City. The idea spread rapidly to other mining districts, and foundries in Marysville, Sacramento and San Francisco were soon in competition producing them. The stream from the most capable could project a stream some 400 feet straight up into the air and could very quickly destroy a three foot thick brick wall at a range of 50 feet. Low grade ore gravel deposits could be quite profitably worked. The tailings from these mines, called "slickens", were washed into the area's rivers and streams ...

Nevada City, with its favorable location in the approximate center of all this new type of mining activity, its salubrious climate at 2,500 feet or so in altitude, its tall pines and its location on a major merchandising trail from Sacramento prospered enormously. Large scale financial deals were struck in the various office buildings on its seven hills. Mining supply stores prospered. The big shots stayed at the National Hotel, established in 1856 and still in operation. Grass Valley also prospered with its many hard rock, quartz/gold mines in its immediate area.

To be continued ...