

# The Rockhound Record

Volume 73, issue 8 Newsletter for the Mineralogical Society of Arizona October 2007

## Next MSA Meeting at 7 p.m... Program for October 12, 2007

"Modern Marvels - Salt Mines", a video about the underground salt mines of Poland that have ornately carved chapels, will be shown.

## Presidents Letter

Hi everyone. Well, finally the weather has cooled down to double digits & we can enjoy being outside again. With the good weather, the gem & mineral shows and field trips have started up again.

Listed elsewhere in this newsletter are two shows. Payson's 10th annual gem & mineral show Oct. 13th & 14th & the Sedona gem & mineral show Oct. 27th & 28th.

Also there are two field trips. October 20th & 27th. These are also listed in this newsletter. I hope you will remember to take an extra bag or bucket & collect some rocks for the MSA to use on the wheel at the A L Flagg show in January. The kids about wiped us out of samples last January. Our booth was one of the most popular ones at the show.

Family Day at the Mining & Mineral Museum is also on the 27th of October, so that makes three choices for that day. Family Day is open from 10:00 to 4:00 & has fun things for the whole family. Jewelry making demos, gold panning, metal detecting & special things for the kids.

And last, don't forget the State Fair. It runs from Oct. 12th to Nov. 4th. If you go, be sure to stop in and see the gem and mineral displays, and of course the MSA's display of fossils & petrified wood from Arizona, courtesy of Ed Nichols.

Hope to see you at the meeting.

**BETTY**

## MSA Contact Info:

President and Coalition Field Trip Coordinator:

Betty Deming (602) 242-1553

Email address [bd\\_mac2003@yahoo.com](mailto:bd_mac2003@yahoo.com)

Newsletter Editor: Deanna Smith (623) 869-3915

Email address [amd9090@msn.com](mailto:amd9090@msn.com)

Mineral Curator: John McLaughlin (623) 979-5246

Field Trip Coordinator (Club Trips)

Ed Nichols (480) 636-1251

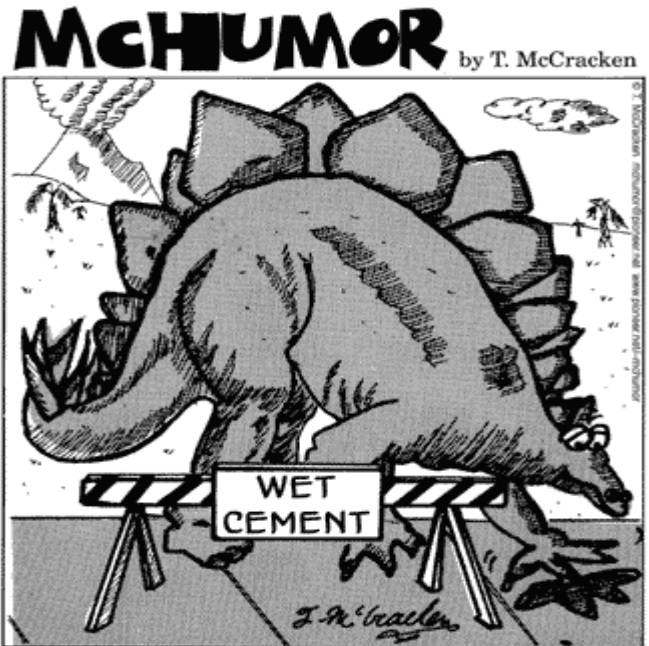
Librarian/Door Prizes/Hospitality

Bob Holm (623) 247-1325

Refreshments: Lynne Dyer (480) 396-2393

Webmaster: Barbara Atkinson

**MSA Board of Governors**  
**Lynne Dyer, Terry Dyer, Bob Holm,**  
**K.J. Werner, Ed Nichols**



Theory #243 on how fossils were made.

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## Arizona Mineral Collector

NOVEMBER 2007



By Raymond Grant

In the last column, I described Arizona's newest mineral, grandviewite, from the Grandview mine in the Grand Canyon. The Grandview mine is in a breccia pipe, a unique type of mineral deposit found in Arizona. These deposits are found on the Colorado Plateau in Arizona and a few are in adjoining states. There are thousands of breccia pipes scattered over the Plateau with about eight percent mineralized and perhaps ten percent of those have an economic value.

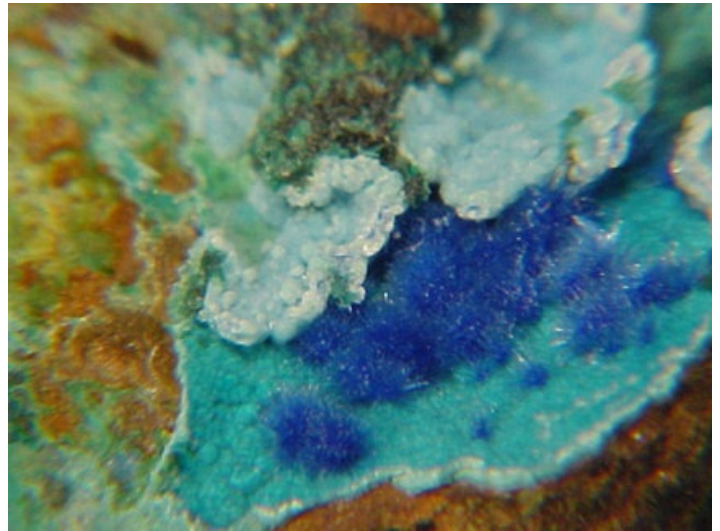
At present, there is great interest in breccia pipes because of their high uranium concentrations. The price of uranium oxide is around \$113 per pound (April 2007) versus less than \$10 per pound some years ago. A little uranium rush is going on in northern Arizona at present.

These deposits are found where large caves had formed in the Redwall Limestone several hundred million years ago. Over time, the layers on top of the caves collapsed into the caves forming the breccia. Later, perhaps 200 million years ago solutions bearing metals found their way into some of the pipes and were able to move through the breccia depositing minerals. Quite a variety of elements were present in these solutions, including antimony, arsenic, cadmium,

chromium, cobalt, copper, gallium, germanium, lead, mercury, molybdenum, nickel, selenium, silver, vanadium, and zinc. The large variety of elements and the subsequent alteration of the primary minerals have led to over 90 different minerals being found in these deposits.

The pipes were originally mined in the 1880's for copper and from the 1950's through the 1980's for uranium. If the price of uranium remains high they may be mined again.

Many of the pipes are in the Grand Canyon national park and therefore not available for collectors or miners. Many of the others are not in the park and some that were mined in the past for copper or uranium might be good places for mineral collectors to explore. They are a long way from Phoenix especially those on the north side of the canyon, but may be worthy of some research.



*picture of grandviewite*

**Word for the Month - - - Breccia** (brĕch'ĕ-ə) : rock composed of angular fragments of rocks or minerals in a matrix that is a cementing material, that may be similar or different in composition to the fragments. A breccia may have a variety of different origins, including sedimentary, tectonic, igneous, impact and hydrothermal breccia.

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## What's Happening?

**October 6 – 7, 2007**

**Eastern Federation Convention & Show**

Hosts: Wayne County Gem & Mineral Society  
Newark New York

**October 12, 2007**

MSA Meeting at 7 p.m. at the Museum.

**October 13-14, 2007 Sierra Vista**

**A Rock Rustler's Dream**, Elks Lodge,  
1 Elks Lane, Sierra Vista, AZ 85635

Sponsored by: Huachuca Mineral & Gem Club  
Hours: Sat. 9-6, Sun. 9-4 Admission: Free

**October 13-14, 2007 – Trona California**

Show & Field Trips & Much Mud- See pages 5 & 6

**October 13-14, 2007 Payson**

**Payson Rimstones Annual Gem & Mineral Show**, Tonto Apache Res. Recreation Ctr.,  
next to Mazatzal Casino on Hwy. 87, Payson,

Sponsored by: Payson Rimstones  
Hours: Sat. 9-5, Sun. 10-4 Parking Free  
Admission: \$3.00, children under 12 free

**October 20, 2007 New River**

**MSA field trip** - see page 7 for details.

**October 27, 2007 Phoenix**

**Family Day at the Museum**

Arizona Mining & Mineral Museum,  
1502 W. Washington, Phoenix, AZ 85007  
602-255-3795, Ext. 10

Hours: Sat. 10-4 Demos and activities for children  
Admission and parking: Free

[www.mines.az.gov](http://www.mines.az.gov)

**October 27, 2007 Burro Creek Area**

Apache Junction Club Leading Coalition Field Trip  
See page 4

**October 27- 28, 2007 Sedona**

**Sedona Gem & Mineral Show**, Sedona Red  
Rock High School Cafeteria, Hwy. 89A and  
Upper Red Rock Loop Road, W. Sedona, AZ  
Sponsored by: Sedona Gem & Mineral Club  
[www.sedonagemandmineral.org](http://www.sedonagemandmineral.org)

Hours: Sat., Sun. 9-4

Admission: Free, parking free, children free  
Show Chairperson: Linda Yee. Sedona, AZ,  
928-203-9476, [lindafyee@hotmail.com](mailto:lindafyee@hotmail.com)

**November 3- 4, 2007 Black Canyon City**

**Rock-a-Rama**, Albin Civic Center, K-Mine  
Rd., Black Canyon City, AZ

Hours: 9-4 Admission and parking: Free  
Show Contact: Don Ingels, 623-374-5344

**November 9, 2007**

MSA Meeting at 7 p.m. at the Museum.

**November 9 - 11, 2007**

**Southeast Federation Convention & Show**

Hosts: Mississippi Gulf Coast Gem & Mineral Society  
Pascagoula Mississippi

**November 10-11, 2007 Lake Havasu City**

**38th Annual Gem & Mineral Roundup**,

Community (Aquatic) Center, 100 Park Ave.,  
Lake Havasu City, AZ 86404

Sponsored by: Lake Havasu Gem & Mineral

Hours: 9-4 Admission and Parking: Free  
Show Chairperson: Jay Cole, 928-764-2854,  
[jaycole@npgcable.com](mailto:jaycole@npgcable.com)

**November 11-12, 2007 – Socorro, New Mexico**

27<sup>th</sup> Annual New Mexico Mineral Symposium  
at the Macey Center at the New Mexico Institute of  
Mining & Technology in Socorro, NM

**Website:** <http://geoinfo.nmt.edu/museum/minsymp/home.html>

**November 17, 2007 Pinedale, Arizona**

**Coalition Trip led by White Mountain Gem &  
Mineral Club based in Show Low, Arizona**

Meeting Place Turn-off to Pinedale, Az – Mile Marker  
327 on Highway 260 at 10:00 a.m

More Info & Map will be in November's newsletter

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## Coalition Field Trip

October 27<sup>th</sup>, 2007 – Burro Creek Area

**Trip Leader** - Harry Warren / Apache Junction Club (480) 986-5852 or email [rockharry@netscape.com](mailto:rockharry@netscape.com). If weather is questionable, we will go anyway. We have not canceled a trip in about 3 years.

**Meeting Time/Place** – McDonald's in Wickenburg – 9:00 a.m.

**Vehicles** – Any vehicle can make it to the parking area, but a 4X4 will take you 100 yards closer to the hill

**Tools** – 3-4 lb hammer and a sledge to break agates which are strewn about this area and extending a mile or so. You need to break/chip the agates to see the colors inside. Also bring a pick, containers for your finds, lunch, water and hiking boots and hat.

**Material** – Colored agates of all shapes and sizes.

**Map** – a detailed map of the destination will be handed out at the McDonald's meeting area.

## 2007 American Federation of Mineral Societies Club Rockhound of the Year Award

**Wes Ault** is the Gates Rock & Mineral Clubs 2007 nominee for Rockhound of the Year. His contributions to our club and community for over 47 years include Officer Positions from President, Trustee & Field Trip Chair to community volunteer activities with Webelos Scouts and school classrooms. He is a Master Lapidist, having taught many in and out of our Club to cut. **Wes** is the field tripper extraordinaire with an encyclopedic knowledge of locations, although distance can be problematic. He once said we were going a couple of miles, but it was 26, leading to our Club's expression of a "Wes Ault Mile." He never seeks credit for his many contributions, but he just gets it done. If you need help, with anything, he'll be the first there, and then be indefatigable. Shows from the Denver area, Roswell, and Quartzite have all benefited from his labor. A diamond in the rough? No, he is a true gem.

Submitted by: **Lynn Peterson, President**  
(reprinted from RMFMS Oct 2007 newsletter)

## Paradise Lost: Arizona South of the Ice

Great ice sheets cover much of the continent. Huge, strange animals roam the cold, windswept plains. You have entered North America—this is the Ice Age! But not in Arizona....

"Paradise Lost" Mesa Southwest Museum's newest exhibition, explores the lost world of Arizona's last three million years. Find out what it was like to live south of the ice during the Pliocene and Pleistocene Epochs. During these geologic time periods, Arizona was paradise - a place so ideal that rich mixtures of the world's animal species were represented - including hyenas, flamingos, and capybaras. Now extinct animals include huge mammoths, fierce bone crushing dogs, and giant ground sloths. This exhibition will feature full skeletons of mammoth, American zebra and the American lion.

"Paradise Lost" showcases the museum's collections and research into the Pliocene and Pleistocene Epochs in Arizona, especially the Safford area. Although not the complete skeletons, fossils from the Chandler, Willcox, and celebrated Gilbert mammoths will be on display. This important local story has never been told in such detail and we are excited and proud to bring Arizona South of the Ice to you.



*Columbian Mammoth (Mammuthus columbi)*  
Artwork by Carl Buell

## Arizona Fun Fact

The Bradshaw Mountains were once also known as the Silver Range because of rich silver deposits found in them. Their current name is due to William (Bill) Bradshaw, a prospector who discovered some of these deposits in 1863. The 'new' mining district was named the Bradshaw District in his honor.

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## 66<sup>th</sup> ANNUAL GEM-O-RAMA

Sponsored by the Searles Lake  
Gem & Mineral Society  
**TRONA, CALIFORNIA**

**Oct. 13-14, 2007**

Sat. 7:30 - 5PM & Sun. 7:30 - 4PM  
SLG&MS Lapidary and Show Building - 13337  
Main St. (corner of Main & Trona Rd.)

**FREE ADMISSION & PARKING**



*halite crystal*

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## FIELD TRIPS

**SEARLES DRY LAKE - (2 1/2 hour trips on  
Saturday, 4 1/2 hours on Sunday)**

Registration: **7:30-9:00 am** and **1:30-2:30 pm** - you must  
register during these times to go on field trips

**Mud Trip**- Saturday Only - Departure 9AM- Cluster &  
barrel hanksite, trona, borax - **\$8 per car**

**Blow Hole** - Saturday Only - Departure 2:30PM-  
Hanksite, halite, borax, sulfohalite - dry surface- **\$8 per car**

**Pink Halite** - Sunday Only - Departure 9AM- In  
brine, beneath hard salt - **\$10 per car**

**Pinnacles National Natural Landmark** -

Self guided, info at show - **FREE**

**Searles Valley Minerals' Plants** -

**Saturday only:** 11,12, 1 and 2 - in bus - **FREE**

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**SEARLES LAKE PINK HALITE  
FROM THE SOURCE - WHOLESALE PRICES**

All Pink Halite collected with permission of Searles  
Valley Minerals

## OTHER SHOW ACTIVITIES

20 Dealers - 50 exhibits - Demos - Games - Gem dig  
Snacks & drinks - **Grand Prize Drawing** - Hourly door prizes

**COMMUNITY EVENTS**  
**PANCAKE BREAKFAST-**  
**TRONA COMMUNITY CHURCH**

(2 blocks north of show)

Sat. 6 -10AM, Sun. 6 -10AM - **Adults \$4, kids under 7 \$2**  
Large groups - make advanced reservations for prompt service  
- call (760)372-5106

**HISTORY HOUSE & OLD GUEST HOUSE  
MUSEUM** - Sat. 10AM to 4PM, Sun. 10AM to 2PM

## TRONA ELKS LODGE DINNER

Sat. 4PM to 7:30PM, **\$8-adults, \$6 for 65+ and 12or less**  
public welcome

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## ACCOMMODATIONS

**VALLEY WELLS RECREATION AREA**

5.3 miles north of show **\$5/vehicle (dry camp, no resv.)**

**TRONA RV PARK** - 1 mile south of show, (water,  
sewer - resv 760-372-5357 ask for Mike)

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FOR MORE INFO :Visit our web page at

**[www1.iwvisp.com/tronagemclub](http://www1.iwvisp.com/tronagemclub)**

or call Jim or Bonnie Fairchild (760)372-5356

Note: above times and prices for show may change

**Searles Lake Gem & Mineral Society**  
**P.O. Box 966, Trona, CA 93592-0966**  
**Phone (760) 372-5356**



*Pink Halite*

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## MINERAL COLLECTING ON SEARLES DRY LAKE, CALIF.

by Jim Fairchild

Searles Lake Gem & Mineral Society  
(reprinted with permission)

The operating company on Searles Dry Lake, Searles Valley Minerals, Inc., permits public mineral collecting only once a year, during Searles Lake Gem & Mineral Society's show on the 2nd Saturday in October. This date was chosen because it's the best time of year to collect. The brine level is below the salt surface (necessary to collect Upper Salt minerals), the mud is dry and hard and can support the heavy equipment used to bring it to where it can be prospected for minerals, and the pink halite has formed well and not yet begun its annual winter dissolving. The weather is also cool enough to make collecting comfortable (Searles Valley can reach 118°F during the summer).

During the show there are 3 field trips with different specimens available. The first, on Saturday at 9 A.M. will collect minerals found in the near-surface muds. A large backhoe digs up to 200 tons of mud and loads it into trucks that carry it about two miles and spread it in an area where visitors can look for specimens. This trip features very large Hanksite crystals up to 3 or 4 inches across, large clusters of Hanksites growing together with other minerals (some clusters up to 100+ pounds), occasional large Borax crystals, and bladed Trona crystals. These are buried in very fine, sticky, black **MUD!** You will get very **DIRTY!** At the collecting area there will be brine to wash your crystals in and brackish water for washing yourself. You may want a geologist's pick, three-tined garden cultivator, or a hand trowel to work through the mud to find good specimens. How long has it been since you played in the mud!

The second trip at 2:30 P.M. on Saturday is to the salt surface where Upper Salt minerals from 30 to 45 feet beneath the surface are lifted to the surface. The rarer minerals available are Hanksite,

Sulfohalite, Borax, and Trona. Each of these is found in just a few places in the world (Hanksite is found only one other place, Lake Katwe in Uganda, Africa). There is also a demo where several tons of these minerals are "jetted" from below and spread across the surface. This trip is the most popular with up to 1000 collectors each year. Since collecting is on a dry salt surface and the material is spread thin, collecting is clean and easy and no special tools are needed. However, you may get your shoes wet with brine if you stand too close during the "jetting" demo or rush in just after the demo ends.

The third field trip at 9 A.M. on Sunday is to collect beautiful pink halite. The best specimens are found on the underside of overhanging ledges beneath the surface of open brine pools. The best ledges are usually in the deepest pools. To collect your specimens you will have to chop off the ledge. Since most ledge material is tough and hard, heavy digging tools such as picks, heavy steel bars and sledge hammers are needed. Since the brine pool may be up to 2-3 feet deep, you may want a partner to catch the specimen as it is chopped off so that it does not get lost. Some good specimens are also found where a pressure ridge has created a void at or just below the brine surface.

All Searles Dry Lake minerals dissolve easily and quickly in water. **DO NOT WASH THEM IN WATER!** Use brine. Although brine can be obtained on the 2<sup>nd</sup> & 3<sup>rd</sup> field trips, this brine is not saturated in sodium sulfate. Since Hanksite is about 85% sodium sulfate, washing it in this brine can result in leaching of the crystal surfaces. Brine from deep wells that is saturated in sodium sulfate is available for purchase at the General Store in the Show Building. But even when using deep well brine, do not soak your specimens in the brine, and keep the brine near room temperature. The sodium sulfate in the brine changes solubility very quickly with temperature and the stable crystal form of the sulfate minerals changes at about 60°F to form a highly hydrated salt. If this occurs it will probably destroy your specimens.

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## MSA Field Trip – October 20, 2007

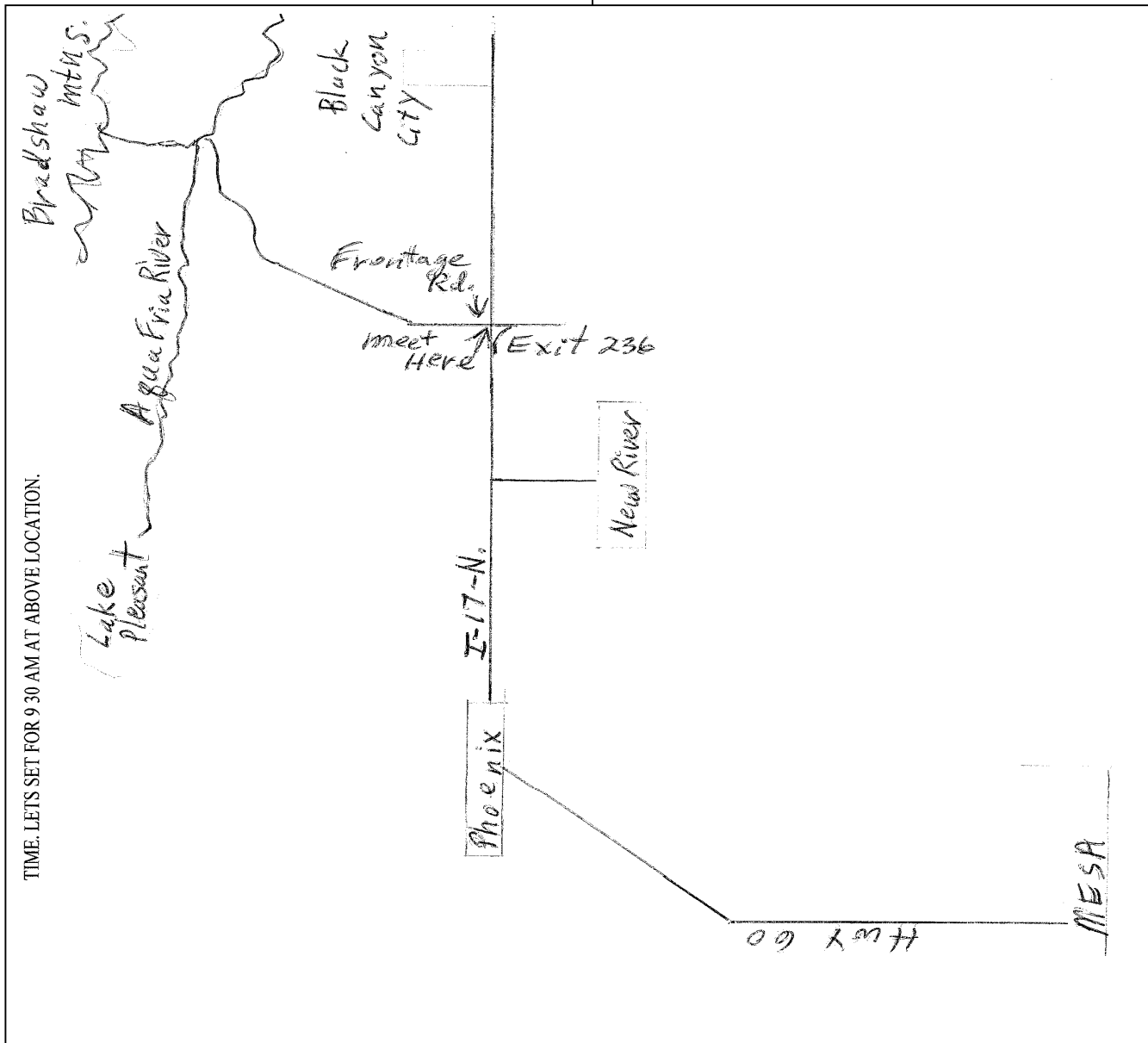
**Fearless Field Trip Leader:** Ed Nichols  
Cell Phone (480) 370-6716 / Home (480) 636-1251  
Call if you need more details.

We will be traveling north on I-17 from Phoenix on this field trip. The location sites are sites 31 and 32 in Neal Bearce's excellent new book on minerals, fossils and fluorescents of Arizona. I hope our weather has finally cooled by then.

**Meeting Place/ Time:** We exit north of New River, on exit #236 which is Table Mesa Road. We'll meet just west of I-17 on the frontage road at 9:30 a.m. Look for the yellow MSA sign. Site 31 has fluorescent calcite near Cottonwood Gulch. Site 32 is a quartz/mica pegmatite location.

**Tools needed** – Rockhammer, sledge, pry bar, plastic eye goggles are a good idea around hammering rockhounds.

**Bring:** water and your choice of snacks.



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## Board Meeting September 8, 2007

Attending were Betty Deming, Bob Holm, Ed Nichols, Terry & Lynn Dyer and Deanna Smith.

A recent turnover in MSA officer positions was discussed. Sally Fiske is taking over as Treasurer, Betty Deming as VP and Deanna Smith as Secretary, all thru the end of the year, 2007.

Ed Nichols and Lynn Dyer volunteered for the Nominating Committee. If you are interested in serving as the new MSA president, vice president, secretary, or treasurer, give one of them a call. Otherwise, be careful of making eye contact with them or any sudden movements in their presence.

What do these positions entail? Well, other than fame and acclaim ....

- 1) The President is the MSA's executive officer and presides at all MSA general and board meetings. The President appoints committee chairpersons and is an ex-officio member of all committees. I am not sure if this position comes with a gavel, but wouldn't that be nifty?
- 2) The VP is in charge of procuring the speaker for nine MSA general meetings. The Board discussed that the VP could delegate, to 9 different MSA members, the responsibility for each to find a speaker/presentation for the MSA meetings. The VP also fills in for the President when necessary.  
  
*Note: The Board also discussed the possibility of combining the President and VP positions if it becomes too difficult to fill both positions.*
- 3) The Secretary takes the minutes for the MSA general and board meetings and hands these in to be printed in the MSA newsletter. Also is in charge of MSA correspondence.
- 4) The Treasurer keeps a record of MSA funds, (income from membership dues, expenses etc.) They also make sure new member info is sent to the MSA newsletter editor and new member

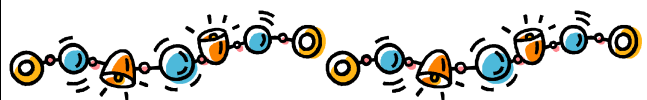
badges are ordered. They present a brief financial report at the monthly MSA general meetings (total of expenses, income etc), and an itemized report at the annual business meeting.

Betty mentioned that the MSA trailer kept at Marc Watson's house was broken into and the lock damaged. Nothing is missing. Terry Dyer volunteered to inspect it and make any necessary repairs.

There are many books and magazines in the MSA library, which are not being utilized. The board discussed placing the magazines for free giveaway in MSA meetings. The books will be inventoried and priced and then made available to MSA members first and then sold at the Flag show.

Since the MSA no longer has its own show, the show cases being stored in the MSA's trailer will be sold. If you are interested, call Betty Deming to arrange picking one or more up.

The MSA display case at the Arizona Fair will be on Arizona fossils and petrified wood. Ed Nichols will contribute specimens and Terry Dyer came up with an excellent title for the marine fossils section: "Arizona Oceanfront Property". The display has to be put in by October 6<sup>th</sup>, so if you have any Arizona Fossils, give Betty Deming a call at (602) 242-1553.



What do silversmithing and mothers-in-law have in common? Silversmithing by the American Indians is not an ancient art, having begun in the 1860's in the southwest. Among the first creations were tiny silver bells worn by mothers-in-law. Since it was the custom in some tribes for the husband to have nothing to do with his mother-in-law, when he heard the tinkle of the bells, he would absent himself from the premises.

Author Unknown; source Hourglass News Jul-Aug 1994.



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## Field Trip Report on Agate 2007 hosted by the New Mexico Chaparral Rockhounds and RMFMS

By Deanna Smith, editor

One word to describe this trip: beautiful. The weather (despite occasional sprinkles), forest scenery and material found – all beautiful. About 60 rockhounds from Kansas, Wyoming, Texas, New Mexico, Arizona and California, rockhounded their rear bumpers to the pavement for the return trip home. Everyone found mucho agate: snowflake, banded, and tube, Golden Luna & Luna Blue. Petrified wood, obsidian, jasper and quartz crystals were also found.

The Chaparral Rockhounds hosted this August trip with the Rocky Mountain Federation (RMFMS). Trip leader Yonis Lone Eagle is the RMFMS New Mexico/Texas State Director.



(Command Central - field trip leader's tent where we met in the p.m. around the campfire and in the a.m. before heading out to rockhound)-picture taken by Ed Vos/Payson Rimstones

Arizona rockhounds came from the Payson Rimstones, Prescott Gem & Mineral, Huachuca Mineral & Gem in Sierra Vista, Sedona Gem & Mineral, Leaverites (Phoenix) & MSA.



(Picture of everyone getting ready to hike to some Luna Blue)-picture courtesy of Ed Vos/Payson Rimstones

There are only small towns in this area of New Mexico, and the closest one to where we camped was Reserve. While we were there, we learned that local rockhounds are beginning to organize a local club and they held their first rockshow at the local fairgrounds.



(Parked at Red Hill site – ancient riverbed with wood, agate, jasper and quartzsite)-picture courtesy of Ed Vos/Payson Rimstones

While this year's trip was a Rocky Mountain Federation trip, next year's trip (around Labor Day) will be a Tri-Federation trip. Plan on bringing local material for trade with rockhounds from other states.

I give this trip a two rockhammers up.

