Chips & Tips

September 14 Newsletter

MLS Sponsor—Phoenix Gem & Mineral Show

Meeting place—North Mountain Visitors Center

Maricopa Lapidary Society Officers (2014)

President	Larry Jensen	8366 W Andrea Dr, Peoria AZ 85383
Vice President	Pedro Chavez	7263 W Crystal Rd, Glendale, AZ 85308
Secretary	Ford Doran	2913 S Rita Ln, Tempe, AZ 85282
Treasurer	Ann Baker	1719 N 31st Pl Phoenix, AZ 85008

Committee Chairpersons

Bylaws	Shirley Cote
Coalition	Robin Evans
Courtesy	Nancy Megahan
Membership	Sue McClees
Displays	John Rusinek
Mineral Identification	Joanne Hesterman
Parliamentarian	Paul Finell
Door Prizes	Pedro Chaves
Hospitality	Loretta Meador
Facilities	Shirley Cote
Historian	Frank Burns
Librarian	Robin Evans
Museum Co	Doug Duffy, Shirley Cote
Field Trips	Robin Evans
Program Chairperson	Ann Baker
Newsletter Editors	Ann Baker, Larry Jensen
Past President	Paul Finell

Meetings. 7:00 PM, 1st Monday of each month at the North Mountain Visitors Center (12950 N 7th St Phoenix). A meeting will not be scheduled in July due to vacations, and if a holiday falls on the 1st Monday, the meeting will take place on the 2nd Monday (eg, September because of Labor Day).

Annual Dues. Individuals $12, family $18. Failure to pay the dues by the end of the January meeting may result in the loss of membership (see Club Bylaws).

History of the Club. The Maricopa Lapidary Society (MLS) was founded in 1948 by a small group of dedicated lapidaries. The primary objective of the club was to educate members in the lapidary arts, principles of geology, the natural history of mineral, and rockhounding.

Chips and Tips. Monthly newsletter published by the Maricopa Lapidary Society. The Society (Club) is a member of the California Federation of Mineralogical Societies and is affiliated with the American Federation of California Federation of Mineralogical Societies and the American Federation of Mineralogical Societies. All material for publication should be submitted via email to the Editors by the 10th day of each month.

Mailing address. Maricopa Lapidary Society, P.O. box 36683, Phoenix, AZ 85067. It is best to email your newsletter items to ljense@midwestern.edu and rockhound61@cox.net.

Maricopa Lapidary Society
September 8, 2014 Minutes

Call to Order and Pledge of Allegiance

Larry convened the meeting at 7:02 PM Pedro led us in the pledge of allegiance.

Approval Minutes

Both the June and August meeting minutes were approved.

Announcements

Visitors: We had two new visitors: Joy Parker who has just moved to the Valley from the San Diego area, but who had previously been a member of the Tucson Club before moving to California; and Richard Holle has been an active collector of rocks from his former home in Kansas and is now looking forward to collecting in Arizona.

Illnesses and deaths : Barbara Larsen passed away last Sunday. Ann will send a card expressing the club's sadness. There will be a service for Barbara at the Presbyterian Church at 4141 E. Thomas this coming Sunday.

Birthdays and Anniversaries: Larry and John have birthdays this month and Robin and Scotty are celebrating 22 years together.

Field Trips: Robin will be leading a trip out near Wikieup for Lizardstone on Sept. 27. Four-wheel drive is necessary from the parking area to the collecting site. For those without 4 WD, shuttles will be worked out with those that do have 4WD.

Classes: Doug is thinking of starting silver-smithing classes here at the North Mt. Visitors' Center in the near future. Joann will be doing wire wrap at the Qdoba at 7th Street and Glendale on Saturday, September 20 from 11:30 to 3:30.

Rock Shows: Buckeye is hosting a rock show the 2nd weekend in October with Sedona having theirs the following weekend.

Equipment: Dennis is going to be donating some saws to the club. Ford bought two 8" 100 grit grinding discs at the recent Tucson show to add to our kit.

FYI: Old issues of "Desert Magazine" are now available online. This magazine had many field trips mapped out with great descriptions of the terrain and the materials.

Old Business

Earth Science Day-Saturday October 18 at Mesa Community College. We still need members to staff our table. See Larry for time slots.

Fall Picnic-Robin and Scotty will host our annual fall picnic at their house on November 1st.

New Business

October Meeting. Our MLS meeting coincides with the Local GIA meeting. After a short discussion Frank moved and Will seconded the motion that we join the GIA meeting for the presentation portion only of their meeting (The Tsavorite Story) and then reconvene for our regular meeting. Ann added a friendly amendment which was accepted by both Frank and Will that MLS contribute $50 to help cover the expenses

that the local GIA club has incurred for this special program. The members present unanimously agreed to the motion and the amendment.

Committee Reports

None presented

Treasurer's Report

None presented

Rock and Mineral Identification

* Red druzy specimen from Nevada-Orpiment and realgar (arsenic sulfide)
* Quartzsite from Wells, Nevada-fine grainy texture
*Smithsonite (zinc carbonate)
*Owyhee Jaspers, Coyote Ridge, Owyhee Dendritic, iron/nickel rind on outside
*Banded Chalcedony with light blue Pietersite
*Zebra Stone (Marble) from S. Utah
*Lumpy nodule-most likely a "Payson Brain" type of geode
*Pink Calcite from Ajo
*Corundum bearing rock from N. Carolina
*Silver Ore

Educational Presentation

Larry began the presentation with a slide of the earliest example of "picture rock" which was an Italian dendritic limestone. He then showed us a few slides of rocks he obtained while at the recent Demming, New Mexico show: Big Diggings Agate and Lava Top and Baker thunder eggs.

The theme for tonight is ***From Rhyolite to Jasper***. Jasper originates from felsic, or silica-rich magmas, which cool quickly (sometimes so quick as to form obsidian), or if in an explosive event as pyroclastic tuffs. Opal and opalite can also be source material for jasper. Since jasper is not considered a precious stone it has not received the respect and rigorous studies as have precious stones. (The Rodney Dangerfield Syndrome of the rock world.) But because of the bold patterns and vivid colors found in many jaspers, it truly deserves more study. Larry referred to an Italian researcher, Marco Campos-Venuti, and his system of classifying jaspers as follows:

1. **Oceanic**—from silica bearing shells (diatoms, radiolarians). These layers of microscopic plants and animals are then buried under the ocean and at some point silica rich solutions percolate and solidify the material into solid rock. Examples are banded iron, pastelite, and tiger iron/tiger eye and flint. Most flints have poor colors and patterns. Australian Mookite is an exception, which has bold color and pattern and takes a great polish.

2. **Volcanic**—stratiform or massive in structure. Water, sometimes as an alkali rich solution, percolates through the rhyolitic tuffs and/or obsidian and recrystalizes the rock with additional metal oxides (most often iron) adding colors and patterns. These impurities are called chromaphores. The dissolved silica can sometimes form a kind of silicon dioxide gel in the process, later solidifying as a new rock. Examples of these massive jaspers include: Munjina, Noreena, Mexican Imperial and Owyhee Gem.

Jaspers that retain more of the rhyolitic characteristics include: the orbicular types (poppy), Mushroom jasper and Mexican Butterfly jasper.

3. **Fossilization—**These rocks began as organic materials and then became mineralized before decomposition set in. Examples are petrified wood, fossilized coral, turritella agate, fossilized stromolites, and fossilized bog.

4. **Chemical—**Chemical rich solutions from hot springs can infiltrate the silica rich rocks and the results can be quite striking as seen in the bold patterns of Willow Creek, Bruneau, and Morrisonite jaspers.

Show and Tell

Larry: Picture Jaspers from the Owyhee region
Dennis: Tiger Iron sphere
Paul: Faceted Citrine (Brilliant Cut)
Frank: Rough Rubies from N. Carolina, Faceted Blue Topaz
Ford Rocky Butte Jaspers, Leopard Jasper Bola, Botswana Agate buckle
Will: Luna Blue Agate slabs from Eastern Arizona near Snowflake
Ann: Silver Ore-this sample stumped us all on the rock ID portion of our meeting.

Door Prizes Drawings

Show and Tell: Ann
1st prize: Ted
2nd prize: Paul
3rd prize: Richard

Refreshments

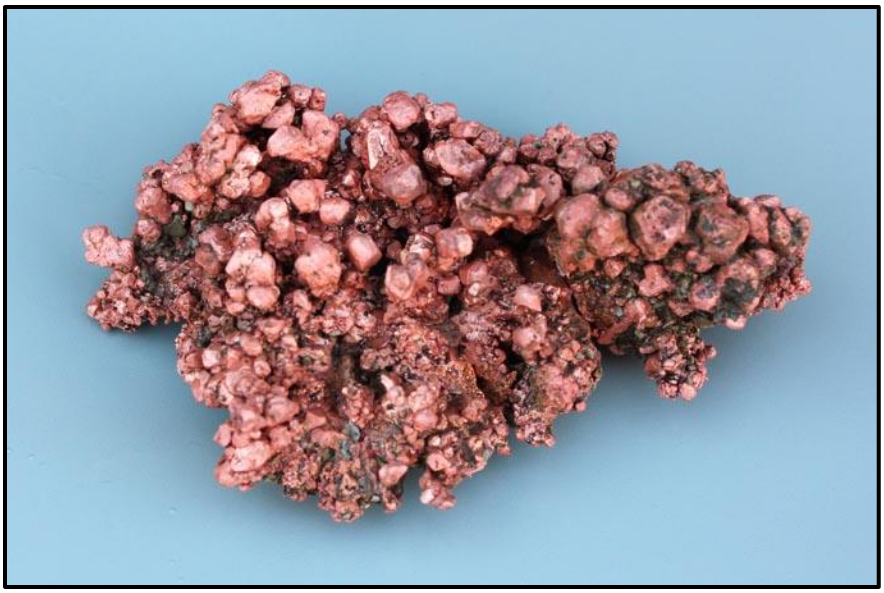
Tonight: Robin, Ann, Larry, and Loretta
Next Meeting: Denise and Frank

Adjournment

Meeting adjourned at 8:44 PM

Minutes submitted by: Ford Doran, Secretary

Next Meeting: Oct 6, 2014



Ajo Native Copper. The specimen was black when I acquired it. A few minutes in dilute pool acid revealed the copper color.

Ajo Mica. This is a huge specimen of mica, which is now owned by Ann Baker. It was purchase in an estate sale.

Coalitition

Sponsored by the Payson Rimstones Rock Club. Meet at 9 AM in the Bashas' parking lot (near Taco Bell). The Shoofly Agate that will be collected is great for cabbing.

Message from the President

Dangerous Minerals in Our Rock Collections

In the September issue of Rock & Gem magazine, Steve Voynick reported on the 10 most deadly minerals. Accordingly, these minerals are cinnabar, orpiment/realgar, stibnite, torbernite, arsenopyrite, chrysotile, galena, hutchinsonate, chalcanthite, and coloradoite. Now before you start discarding your prized specimens that are part of this ill famed list, know that most collectors possess “dangerous mineral” specimens. Most have interesting shapes and quite pronounced with color. The long and short of it is that to avoid intoxication, wash your hands after working with these minerals, do not lick a specimen or inhale its dust, and do not handle them when you are eating a sandwich during lunch. This means you have to be use caution when collecting or examining specimens at the rock shows. Allowing fear to run your life is the wrong approach. Educating yourself on their toxicity potential, however, is important.

Most of the toxicity is attributed to certain elements, namely mercury, tellurium, copper, thallium, lead, arsenic, and antimony. In addition, carcinogenic fibers and radioactive particles should be avoided or at least contained. Cinnabar, which of course contains mercury sulfide, is the single most toxic mineral collected by rockhounds. Mercury exhibits neurotoxicity and affects the immune system. Wear a mask if you insist cabbing this material. Orpiment and realgar are 2 minerals that are closely related. They are made up of arsenic sulfide minerals. Remember arsenic was the choice for assassins among the ruling classes of Europe for centuries. Incidentally, a lot of rocks contain small quantities of arsenic, even the jaspers that I work with from Oregon. This is precisely the reason why I cab with a high-quality mask. Also, you will never see me licking a rock as the hazards are too great. Stibnite is contains antimony. This element is used in pesticides, so wash your hands often. Torbernite is a colorful oxidized uranium mineral. No need to say more here. When working with arsenopyrite, use the same percautions that you would with orpiment or realgar. Chrysotile is a magnesium silicate but it makes the list because it falls in the asbestos group and has the potential to produce a pulmonary malignancy in the unwitting person. Galena is a lead sulfide, and lead adversely affects the nervous, skeletal, reticuloendothelial, and excretory systems. Hutchinsonite also contains arsenic and lead, and chalcanthite is a copper sulfate. Copper will kill everything in your fish aquarium within hours or days. Coloradoite contains mercury. The take home message is be cautious with all minerals and rocks, stop licking them, use breathing protection in the shop, and wash your hands a lot. Remember, if you collect and work with rocks, it is better to be OCD than fatalistic. Think about it.

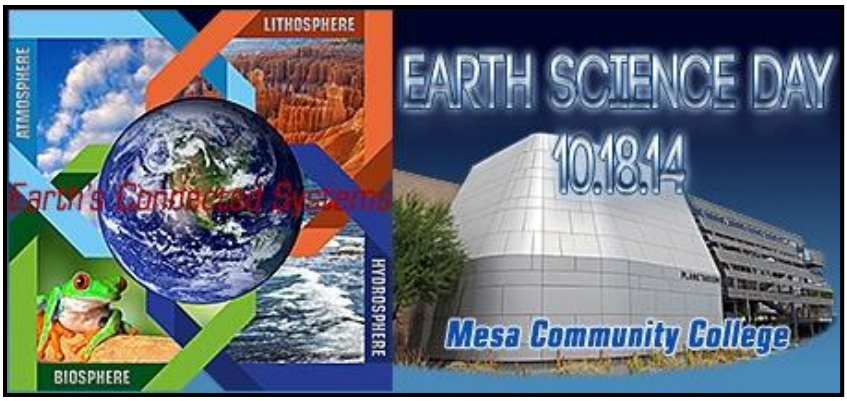
Rock & Gem subscriptions: $27.95 for 12 issues, call 706 291-1549 or subscriptions@becket.com. If you enjoy collecting rocks and minerals and work in the lapidary arts, you will find the monthly read invaluable. Incidentally, in the next few days, they are running a special.

Larry Jensen, MLS President

Realgar/Orpiment. Realgar is a ruby-red mineral and orpiment is orange or yellow. This specimen is most oripiment, but oftentimes both arsenic sulfide mineral occur together. In the past, these minerals were used as pigments. Realgar should be stored in a dark box or drawer because it has the tendency to break down if you leave it out on the shelf.

Australian Opalite. This is a great specimen that I probably acquired from an estate sale—cannot remember for sure, however. If I were to slice it, great cabs would result, but I have no intentions of destroying a specimen as beautiful as this one.

Front Cover. Photo by Larry Jensen of the Owyhees, looking north near the Coyote Ridge Mine



GREAT FAMILY EVENT

OCTOBER 18, 2014

10 AM–4 PM • FREE ADMISSION • FREE PARKING

Schedule

10:00 – Earth Science Day opens

10:15 – Planetarium Show – Seating is limited and free tickets should be picked up at the information table.

11:00 – Lecture – *Lightning and Thunderstorms in Arizona*. This lecture provides a brief overview of our current knowledge of the lightning discharge and then presents the long-term patterns of cloud-to-ground lightning strikes across Arizona and more.

11:30 – Activity – *Geomodels*: This cut-and-paste activity involves building models to learn about the rock and water cycles, crystal forms, and prehistoric creatures.

12:30 – Planetarium Show – Seating is limited and free tickets should be picked up at the information table.

1:00 – Lecture – *Geological Events in the News.* Volcanic eruptions in Iceland and Papua New Guinea; lava flows threaten homes in Hawaii; earthquakes rattle Calif. Learn what's behind these recent news headlines and if are they connected.

1:30 – Activity – Demonstrations of the different types of volcanoes and earthquakes.

2:30 – Planetarium Show – Seating is limited and free tickets should be picked up at the information table.

3:00— Lecture/Demonstration – *Creepy Crawlers.* Halloween is coming up, and creepy crawlers, such as spiders, worms, and snakes, are part of the scary celebra-tions. See these creepy critters up close and learn about their life cycles and role in the biosphere.

PLUS OTHER FUN ACTIVITIES