President’s Message

Our September 13th program presented by Mike Fleeman “Rocks from Space: A Study in the Different Types of Meteorite Falls” was another Out of this World Hands On Extravaganza! Thank you Mike for bringing the excitement and offering a tactile experience for membership to see and handle rare masses from Moon, Asteroids and various one-of-a-kind specimens. Program was timely due to July 27, 2018 meteorite fall in Glendale, AZ and fortunate discovery of an Ordinary Chondrite by Glendale resident Cody Horvath.

We survived another Arizona summer and October is already feeling cooler than previous years! Cover of October RR features photos of Mineral Species named in Honor of MSA Members; Bob Jones (Bobjonesite), Ray Grant (Raygrantite), Ron Gibbs (Ron Gibbsite) and Joe Ruiz (Ruizite). Thank you to each of these members for helping improve our hobby and nurturing curiosity in earth science and inspiring us to collect and preserve earth’s varied mineral treasures for future generations.

Our October 11th program will be presented by Miss Lauren Megaw on "The Art of Setting Up Your Case to Be Judged – And Why You Should Do It!” Lauren’s talk is especially meaningful for MSA junior competitive exhibitors with focus on importance of mentorship both for competitors as well as the hobby at large. Lauren started her journey in the mineral world essentially in utero. The daughter of Dr. Peter Megaw (Exhibits Chair of the Tucson Gem and Mineral Show®), Lauren grew up in the hobby. Lauren began competing in the Tucson Gem and Mineral Show® as a junior. During her tenure as a junior competitor, she won Best Junior 2 times, Best Junior Master 4 times, Best Novice, Best Advanced and Best Master, Lidstrom Trophy 2 times, and finally top award Desautels Trophy.

Our November 8th program will be presented by our own Mr. Bob Jones on "Cornwall: Mining, Minerals and Amazing History.” Bob will take us on an adventure of Rashleigh and Caerhays Castle collections and other amazing things. This will be a debut of Bob’s Cornwall program for a mineral club or symposium and we are very lucky Bob can present it for Mineralogical Society of Arizona.

December is MSA’s 83rd Birthday (1935-2018)! MSA will celebrate our Anniversary on Saturday, December 15th at Holiday Jamboree/Christmas Party with Adult & Junior Competitions, announcement of 2018 Rockhound of the Year and election of 2019 Officers and Board of Governors. Jamboree will be packed with food, fun, friends, silent auctions and raffles.

Juniors Program: Future Rockhounds of America (FRA): Junior program to resume at January 11, 2018 meeting. Junior members, please arrive no later than 6:40PM for Junior Program before General meeting. Junior Raffles prizes will be awarded after Junior program. Junior Program is 6:45-7:15PM.

2019 Dues are Due. Please see Membership Application on MSA website msaaz.org under MSA CLUB tab. You can also renew via PayPal on website or download form from website & bring with payment to January meeting. * No dues will be collected at December meeting to allow Treasurer & Membership Chair to enjoy party. *

BIG MSA THANK YOU to following who joined me in making donations to MSA since previous MSA meeting:

Dr. Carleton Moore  Dr. Shirley Fiske  Dawn & Don Boushelle
Dr. Nathan Scholten  Dana Slaughter
President’s Message - Continued.

QUALITY MINERAL DONATIONS WITH LABELS NEEDED: Please see Chris Whitney-Smith. Mineralogical Society of Arizona is a 501(c)(3) non-profit organization and will gratefully acknowledge your significant In-Kind Donation with a TAX Deduction Letter. All individuals making In-Kind donations to our non-profit organization may claim a tax deduction based on the fair resale value of the items donated. It is the contributor’s responsibility to determine this value. Your contribution to Mineralogical Society of Arizona is fully deductible for tax purposes to the extent allowed by the current tax laws. If you have any further questions, please consult your tax advisor. Thank you again for supporting Mineralogical Society of Arizona!

MSA TABLE OF FREE AWESOMENESS: Based on recent field trips and donations, several specimens or publications may be available for MSA membership for Free. Based on available quantities and first come first serve basis, members are requested to pick one item and allow all members who are interested a chance to take home a little treasure. No hoarding allowed. This is a generous and fun practice to build collections & offer members who weren’t able to join a field trip an opportunity to select a specimen from recent excursions.

WEARING MSA NAME BADGES PAYS OFF!! MSA members wearing their MSA Name Badges to general meetings will be issued a special raffle ticket and be eligible to participate in raffle to play Prize Drop game with opportunity to win one of four prizes! If you don’t have an MSA Name Badge, see Membership Chair, Mr. Ron Ginn at meetings or email Ron at MSAClub1935@msaaz.org. MSA Name badges are $10.00. It’s not just about winning prizes, it’s fellowship and getting to know each other.

2018 MSA SPECIAL PROGRAMS:

<table>
<thead>
<tr>
<th>MONTH/ DAY</th>
<th>ROOM</th>
<th>SPEAKER / PROGRAM</th>
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<tbody>
<tr>
<td>October 11th</td>
<td>Serra</td>
<td>Lauren Megaw &quot;The Art of Setting Up Your Case to Be Judged – And Why You Should Do It!&quot;</td>
</tr>
<tr>
<td>November 8th</td>
<td>Serra</td>
<td>Bob Jones &quot;Cornwall: Mining, Minerals and Amazing History&quot;</td>
</tr>
</tbody>
</table>
Mindat.org is the largest mineral database and mineralogical reference website on the internet. Mindat.org contains worldwide (and a few spots on the moon) data on minerals, mineral localities, mineral photographs and other mineralogical information. Mindat.org is growing every day, with new mineral information, localities and photographs added by members. Join Mindat.org to keep the site updated with information on areas you are familiar with.

Users of mindat.org range from novices just becoming aware of minerals to professional mineralogists. All levels of expertise are welcome to participate on mindat.org, everybody is still learning more about mineralogy. The chat room allows people interested in minerals to communicate with each other in real time, while the message board provides a forum for people that have questions about many aspects of mineralogy to have them answered in a more formal manner.

INTRODUCTION

Minerals
1. Mineral Information
2. Mineral Classification (Chemical groups)
   - Strunz Groupings
   - Hey Groupings
   - Dana Groupings

Localities (Mineral lists)
1. Standard Locality Display
2. Regional Report
3. Detail information about mineral at a locality
4. Recent Locality Changes

Photographs
1. Photographs
2. Photo of the Day

SEARCH

Minerals
1. Mineral Names
2. Search by Chemistry of a mineral
3. Mineral Identification by physical properties

Localities
1. Locality Search
2. Mineral Associations
3. Mineral occurrences in a region
4. Mineral occurrences in a country

Photographs
1. Search Photograph database
2. View a member's Mineral Photograph gallery
3. Mineral photographs in a region
2019 Membership Dues.

2019 DUES ARE DUE
THANK YOU FOR YOUR MEMBERSHIP

RENEWING & NEW MEMBERS:
Existing and New Members can renew and Join Us at msaaz.org, under “MSA CLUB” tab, click on “Smiley Face” or “Joining Hands” and pay via PayPal. You may also bring membership application & dues to next meeting and give to Membership Chair, Ron Ginn or mail to Membership Chair at following address:

MINERALOGICAL SOCIETY OF ARIZONA
MEMBERSHIP CHAIR
691 N. VELERO ST.
CHANDLER, AZ 85225

Membership questions can be emailed to Membership Chair, Ron Ginn at: MSAClub1935@msaaz.org.

2019 ANNUAL DUES AND FEES:
Single Adult (18+): $24.00 (Annual: Jan 1 - Dec 31)
Couple: $36.00 (Annual: Jan 1 - Dec 31)
Junior (Under 18): FREE
Legacy Life Members: FREE (After Initial Payment)

**Refreshment Volunteer List**

**MSA Monthly Meetings**

*For Monthly MSA Meetings:*

If your last name begins with the letters listed during each month; please bring in a snack of your choice to share with MSA members after general meetings. Your cooperation is greatly appreciated.

**MSA will supply drinks.**

<table>
<thead>
<tr>
<th>Month</th>
<th>Letters</th>
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<tbody>
<tr>
<td>January</td>
<td>A, B or C</td>
</tr>
<tr>
<td>February</td>
<td>D, E or F</td>
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<tr>
<td>March</td>
<td>G, H or I</td>
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<td>April</td>
<td>J, K or L</td>
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<td>P, Q or R</td>
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<td>September</td>
<td>S, T or U</td>
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<tr>
<td>October</td>
<td>V, W, X, Y or Z</td>
</tr>
<tr>
<td>November</td>
<td>Open to everyone. Please bring something to share with your friends.</td>
</tr>
</tbody>
</table>

**Suggestions for refreshment foods to bring**

Any type of chips, pretzels, cookies, crackers, fruit, vegetable or meat and cheese trays.

This is a volunteer effort and we appreciate your help in making our social time special for all club members.

**Thank You.**

**RSVP**

Refreshments you will bring to:

carlies_email@yahoo.com

---

**Dish Volunteer List**

**MSA Holiday Jamboree**

*Saturday, December 15, 2018:*

If your last name begins with the letters below, please bring in a dish from list to MSA Holiday Jamboree.

**MSA will supply the meats and drinks.**

- **A - F** Potato, Vegetable or Rolls
- **G - M** Stuffing or some type of Salad
- **N - Z** Dessert

The choice is yours as to what you would like to bring from list.

Hope to see you at our Holiday Jamboree.

Thank you so much for your cooperation.

May you have a Safe and Happy Holiday Season!

**RSVP**

Dish you will bring to:

carlies_email@yahoo.com

---

**Stellar Plate Snowflake**

These common snowflakes are thin, plate-like crystals with six broad arms that form a star-like shape. Their faces are often decorated with amazingly elaborate and symmetrical markings. Plate-like snowflakes form when the temperature is near -2 C (28 F) or near -15 C (5 F), as dictated by the snow crystal morphology diagram [http://snowcrystals.com](http://snowcrystals.com).

© [http://www.its.caltech.edu/~atomic/snowcrystals/class/class-old.htm](http://www.its.caltech.edu/~atomic/snowcrystals/class/class-old.htm)
December 15, 2018 Program: Holiday Jamboree/Christmas Party

Mineralogical Society of Arizona

HOLIDAY JAMBOREE!
Saturday, December 15, 2018
5:00 PM – 8:30 PM
(You may arrive by 4:30 PM to drop off food)
Franciscan Renewal Center, Padre Serra Room,
5802 E. Lincoln Drive, Scottsdale, AZ 85253

If your last name begins with the letters below, please bring in a dish from list to MSA Holiday Jamboree.
MSA will supply the meats and drinks.
A - F  Potato, Vegetable or Rolls
G - M  Stuffing or some type of Salad
N - Z  Dessert

Please RSVP to Carlie Murphy at carlies_email@yahoo.com and let us know what you will bring, so there is not too much duplication.

Jamboree consists of Dinner, Election of Officers & Board, Door Prizes, Raffles, Silent Auctions, Rockhound of the Year Announcement and Junior & Adult Competitions for Thumbnails, Self-Collected and Lapidary.
The Rockhound Record, Volume 77, No. 10, October, 2018

September 13, 2018 Mineralogical Society of Arizona General Meeting Minutes.
By Chris Whitney-Smith for Cody Schwenk

The meeting was called to order by MSA President Chris Whitney-Smith at 7:35 PM on Thursday, September 13, 2018 at Franciscan Renewal Center, Piper Hall, Padre Serra Room, Scottsdale, AZ.

Chris Whitney-Smith Opening Announcements:
- Visitors and New Members stood and introduced themselves and were welcomed by membership.
- Chris thanked those who volunteered to bring refreshments.
- Junior raffle held before start of general meeting.
- Adult & Junior Members and Visitors see Bob Holm for raffle tickets if you haven’t received one.
- September Mineral of Month is CHRYSOBERYL.
- October Mineral of Month is Mineral Species Named in Honor of MSA Members; BOBJONESITE, RAYGRANTITE, RUIZITE.
- MSA Name Badges were on front table for those who ordered name badges to pick up.
- Chris introduced program speaker Mr. Mike Fleeman for presentation on “Rocks from Space: A Study in the Different Types of Meteorite Falls.” Mike delighted membership with another out of this world hands on program.
- Chris presented Mike a Certificate of Appreciation for his presentation.
- Members were asked to start thinking of candidates for 2018 MSA Rockhound of the Year (Adult) and (Junior) and to send suggestions to Chris.
- Chris reminded members to RSVP to Chris if they will participate in December TN Mineral Competitions.
- MSA Field Trips:
  - Joey Philpott Jr. retired as MSA Field Trip Coordinator and Eric Putman, who was to assume Coordinator role January 2019, has accepted Field Trip Coordinator role immediately. Big Thank You to Joey and Eric. Cody Schwenk (2018) and Bob Blake (2018-2019), Assistant Coordinators.
  - September 15th to Mingus Mt. Payson for Fossils and if time to Diamond Point for Quartz (Nathan Scholten) leader.
  - September 29th to Anderson Uranium Mine for Carnotite, Weeksite, Agate, Fluorite (Jeff Craig) leader.
  - Refer to May 2018 RR for 2018 List of MSA Field Trips or contact Eric Putman, MSA Field Trip Coordinator.
  - Chris asked for Eric Putman and members who attended MSA Field Trip to Mt. Antero to step forward to receive special Mt. Antero stickers.

Closing Announcements:
- October program to be presented by Lauren Megaw on "The Art of Setting Up Your Case to Be Judged – And Why You Should Do It!"
- Joey Philpott Jr. retired as Editor, The Rockhound Record shortly before September meeting and Chris Whitney-Smith to help catch up RR newsletters for June, September and moving forward. Chris sent out call for content for RR to all members.
- Members interested in helping with RR newsletter, please contact Chris Whitney-Smith.
- Show Time in Denver and many MSA members in Denver.
- 2019 “Mineral Collections in Arizona II” Supplement to M.R.—MSA will feature (7) Juniors, several MSA Adult Members and Special pages.
- MSA in need of new US Flag and Stand and Laptop, please see Chris if you have any connections for discounts for club.
- Check out Free Table of Awesomeness and Thank You to members who donated to Free Table.
- Reminder MSA Name Badges were on front table for those who ordered name badges to pick up.
- MSA Name Badge Raffle and General Raffles for Visitors, Juniors and Members held.
- Members reminded they can bring rock/mineral/lapidary related items for Buy/Sell/Trade at MSA meetings.
- Chris thanked everyone for attending meeting and bringing refreshments. Remember to pick up your containers and leftovers before you leave.

The meeting was adjourned at 9:10 pm.
- Silent Auction was held & Refreshments served.
Future Rockhounds of America (FRA) - Calling All Juniors!
Dr. Nathan Scholten, MSA FRA/Juniors Program Chairman

Greetings Juniors!

Remember to arrive on time and I look forward to seeing you at the meeting!

See you all Thursday.

Nathan

Mineralological Society of Arizona in association with American Federation of Mineralogical Societies, is pleased to introduce Future Rockhounds of America Badge Program for Junior Members age 10 to 17 years.

Please contact us at email: MSAFRA@msaaz.org.

MISSION STATEMENT
Future Rockhounds of America is a nationwide nonprofit program within the American Federation of Mineralogical Societies that develops and delivers quality youth activities in the earth sciences and lapidary arts in a fun, family environment. Our underlying goals are to foster science literacy and arts education through structured activities that are engaging and challenging and by which kids—and the adults who mentor them—learn while having fun.

Check out new JUNIORS tab on MSA website; msaaz.org.
We will start adding content to website in coming months for parents & FRA to download.
Thanks to all Juniors in MSA/AFMS FRA Program and keep on working towards all FRA badges to earn the coveted Rockhound Badge & Rock Star Pin!
2019 Board Nominations, 2018 ROTY and TN Competition

RSVPs REQUESTED FOR MSA DECEMBER COMPETITIONS: MSA Holiday Jamboree is Saturday, December 15, 2018 at Franciscan Renewal Center. We have reserved SERRA Room with large round tables for dinner and the smaller MARCOS Room for competitions.

THUMBNAIL (TN) MINERAL COMPETITION FOR JUNIOR MEMBERS

Call to action for Junior MSA Members to complete your TN selections and refine your labels and presentation for competition. Junior TN Competition will be held at December Holiday Jamboree and it will be here before you know it. MSA competition in December is a springboard for collection refinement and further challenge in Flagg Gem & Mineral Show JR TN competition in January and ultimate competitive entry in Tucson Gem & Mineral Show® in February.

Rules

♦ Each junior member can enter (10-30) thumbnail specimens.
♦ They can be displayed in open TN perky boxes or on bases.
♦ They must be labeled as to what they are and where they are from.
♦ Juniors can collect specimens, trade for them, buy them, use specimens handed out at the meetings.
♦ They will be judged based on TGMS rules for presentation (label completeness & neatness) and what the specimens are.

THUMBNAIL (TN) MINERAL COMPETITION FOR ADULT MEMBERS

Adult Members of MSA, this is a call to action for you to complete your TN selections and refine your labels and presentation for competition. Adult TN Competition will be held at December Holiday Jamboree. MSA competition in December is a springboard for collection refinement and further challenge and ultimate competitive entry in Tucson Gem & Mineral Show® in February.

Rules

♦ Each Adult member should have minimum (30) thumbnail specimens.
♦ They should be displayed on bases.
♦ They must be labeled as to what they are and where they are from.
♦ They will be judged based on TGMS rules for presentation (label completeness & neatness) and what the specimens are.

Members cast ballots for their choice for 2018 Rockhound of the Year at November meeting and winner will be announced at December Holiday Jamboree. Please be sure to congratulate the following ROTY nominees when you see them. MSA like other volunteer organization is only as great as its amazing volunteers and MSA has some Amazing Volunteers! THANK YOU ALL!

♦ STEVE KAMINSKI
♦ CARLIE MURPHY
♦ MIKE WEBB
♦ SHIRLEY FISKE
♦ BOB HOLM
♦ RON GINN
♦ WYATT BUSBY (Junior)
♦ DAVID TIBBITS (Junior)

2019 MSA Nominating Committee for Officers & Board of Governors, Dr. Nathan Scholten (chair) is pleased to present 2019 candidates for election at December Holiday Jamboree:

Chris Whitney-Smith President
Joseph Philpott Jr. Vice President
Steve Kaminski Secretary
Nathan Scholten Treasurer

Eric Putman Board of Governors (Term Exp 2021)
Jeff Craig Board of Governors (Term Exp 2021)
John Tibbits Board of Governors (Term Exp 2019)

John Tibbits to fulfill unexpired term for Steve Kaminski.

Additional nominations may be made from the floor as long as the nominee is present and accepts nomination.

Thanks to everyone for your interest and involvement. Start refining your TN choices and showmanship!
I’m pleased to announce MSA Board has approved expanding MSA’s December Thumbnail Mineral Competitions to include Rocks / Minerals Self-Collected on 2018 Field Trips and Lapidary Art Created in 2018 with Cash Awards.

**MSA DECEMBER COMPETITIONS:**

1. **Thumbnail Minerals**
   a. **Adult:** 1st, 2nd, 3rd
   b. **Junior:** 1st, 2nd, 3rd

2. **Self-Collected Rocks & Minerals on 2018 Field Trips**
   a. **Adult:** 1st, 2nd, 3rd
   b. **Junior:** 1st, 2nd, 3rd

3. **Lapidary Art Created in 2018**
   a. **Adult:** 1st, 2nd, 3rd
   b. **Junior:** 1st, 2nd, 3rd

**EXAMPLE MSA CASH AWARDS BASED ON $50.00 TOP PRIZE:**
- **UNDER 5 Competitors:** $50 winner take all.
- **OVER 5 Competitors:** 1st Place gets $25, 2nd Place gets $15 and 3rd Place $10.

Please **RSVP No Later Than November 16th** to Chris at Ask.ChrisWS@yahoo.com if you would like to participate in any of these competitions to help ensure we have tablespace reserved for you to set up. Once I have received ALL RSVP’s, I will send additional information to participants on time to set-up.

**DECEMBER 2018 MSA COMPETITIONS**
I previously wrote about the books on the Quartzsite area by Erik Melchiorre, the three volumes are Gold Atlas of Quartzsite Arizona. Volume 1 is the Northern Dome Rock Mountains, Volume 2 is Southern Dome Rock Mountains and Volume 3 is Plomosa Mountains. Here are a few more highlights from these very interesting books.

The variety of different types of mineral deposits in the Quartzsite area is really unusual. Erik describes uranium mines, tungsten mines, mercury mines, silver mines, lead mines, kyanite mines, antimony mines, barite mines, along with all the gold mines.

One of the interesting localities he describes in Volume 2 is the Crystal Cavern Claim, the source of zunyite, pyrophyllite, good quartz crystals and world-class hematite specimens. He has a good history of the collecting of specimens from this locality. It has several alternate names; he lists Big Bertha, Purple Cow, and Veta Grande. In the photograph included here of the zunyite in the Harvard Collection it is called the Electric Meatball Mine. At least mineral collectors have a good imagination when it comes to mineral locality names.

Some other items of interest in Volume 1, he has information about the fluorescent minerals in the area and in volume 3 he has a couple of localities that should be looked at for lapidary material. One is the Burro Barite Mine south of Bouse with veins of pink to white barite and another is the Tourmaline Prospects with tourmaline, epidote, quartz, calcite, and hematite. For more information on the books go to info@rockdocgold.com.

**ZUNYITE**, \( \text{Al}_{12b}\text{Si}_{16}\text{O}_{39}(\text{OH},\text{F})_{16}\text{Cl} \), Crystal Cavern Mine called Electric Meatball Mine Dome Rock Mts, La Paz County, Arizona, USA, Harvard Collection on display at Tucson Gem & Mineral Show©; Ray Grant Photo.

**PYROPHYLLITE**, \( \text{Al}_2\text{Si}_4\text{O}_{10}(\text{OH})_2 \), Crystal Cavern Mine; Dome Rock Mts, La Paz County, Arizona, USA, Ray Grant Photo.

**HEMATITE**, \( \text{Fe}_2\text{O}_3 \), Crystal Cavern Mine, Dome Rock Mts, La Paz County, Arizona, USA, Ex. Dave Shannon Collection; Marc Fleischer Photo.
Page 13 Editors Corner
Chris Whitney-Smith, Editor

Rice Museum of Rocks & Minerals
26385 NW Groveland Dr., Hillsboro, OR 97124
Phone: (503) 647-2418
https://ricenorthwestmuseum.org/

Rhochrosite and Sweet Home Mine, please visit following:

THE ROCKHOUND RECORD
Please send inquires regarding The Rockhound Record to:
Mineralogical Society of Arizona, Editor
Chris Whitney-Smith
P.O. BOX 54307
PHOENIX, AZ 85078
ask.chrisws@msaaz.org
(602) 405-1502

* Deadline to submit RR bulletin content is 15th each Month *

* We will be grateful to all those who will point out errors of any kind, including typos.

* Please email your corrections to ask.chrisws@msaaz.org

ESM & MSA Education & Outreach News

On October 24th, Lynne & Terry Dyer, ESM outreach volunteers, taught four classes of third graders (100 students) at Riverview Elem. in El Mirage. They will be doing the same number of classes next Friday, November 2nd at Basis Phoenix Central. During these classes, the students follow along and fill in the rocks, minerals and fossils in their proper places on a chart giving the students the best learning experience - hands-on.

MSA Website Upgrade in Progress

Ron Ginn working on website upgrade. Stay tuned for new look and feel in the near future.

Lynne and Terry’s display at a previous Boy Scout event; Lynne Dyer photo.
Magma Mine Smelter Stacks: Mining History

Smelter Stack Set to be Demolished

Controlled demolition of the Magma Copper smelter complex is the latest phase in Resolution Copper’s reclamation project at our West Plant site that began in 2005. All smelter buildings have been safely demolished and cleanup of contaminated waste materials is ongoing. A target date of Saturday, Nov. 10, has been set for controlled demolition of the chimney stack.

Optimal weather conditions are required for the team of demolition experts to execute the plan, so postponement due to unfavorable wind or other weather factors is a possibility. Technical considerations also could postpone the operation. If all requirements are met on Nov. 10, stack demolition will be carried out between 8 a.m. and 12 p.m. Any delays will be announced via social media and on ResolutionCopper.com.

If demolition is postponed due to weather or other factors, the operation will be rescheduled for the next day during the same time frame until all conditions are ideal and it can be safely carried out.

Safety is our highest priority. Mine property boundaries will be strictly enforced to ensure safe execution of the demolition operation.

We are coordinating with the Town of Superior to facilitate public viewing of the stack demolition. The Town is finalizing plans for closing off a section of Main Street along the Resolution Copper property boundary to vehicle traffic to allow residents to view the operation from a safe location that also provides a good vantage point. In the coming days, we will share details on the Town’s closure of Main Street for public viewing.

We will record video of the stack demolition and make a clip available on our website and social media channels.

Resolution Copper YouTube Videos:

https://www.youtube.com/watch?v=al83fAu7O4Y
https://www.youtube.com/watch?v=zkGFYhlnWxY
MSA Program Preservation Video Archive (PPVA) Committee

Mineralogical Society of Arizona and Flagg Mineral Foundation have partnered on significant project to record, preserve and archive notable speakers and their valuable programs at MSA Meetings and Minerals of Arizona Symposiums in a video library on MSA website with link to FMF website for members only access. Steve Kaminski, Shirley Fiske, Ron Ginn, Mike Williams, Wyatt Busby, Nathan Scholten, Mike Fleeman and Bob Jones have been instrumental in launch of project and we are honored Bob agreed to kick off endeavor on June 30, 2018 with Four Talks Covering Four Continents!

MSA and Steve have been leading this important endeavor for nearly a year and MSA Junior Wyatt Busby with parents consent joined project and helped film June 30th engagement and has been helping Steve Kaminski film MSA meetings.

MSA Program Preservation Video Archive (PPVA) Committee:

Chairman: Steve Kaminski
Associate Videographer: Steve Kaminski
Assistant Videographer: Wyatt Busby
Program Editor: Dr. Shirley Fiske
Website Library Archive: Ron Ginn
Website Library Archive: Dr. Mike Williams
Program Manager/Facilitator: Chris Whitney-Smith
Programs Consultant/Speaker: Bob Jones
Film Location Consultant: Dr. Nathan Scholten
FMF Liaison: Phil Richardson

Special Thanks to Bob Jones for joining video archiving project early-on to preserve for posterity important talks from speakers that inspire and drive our hobby … it’s a gift for present and future generations.

Thank you for being an inspirational leader in our Arizona groups and hobby!

Chris Whitney-Smith
WANTED
EDITOR

HELPFUL EXPERIENCE

Microsoft Publisher and Word
Publishing - Writing - Editing
Graphic Art

Interested candidates, please contact
Chris Whitney-Smith
Ask.ChrisWS@yahoo.com
MSA Board approved for MSA to be a co-signer on Southern California Paleontological Society letter to BLM as well as send MSA letter of support to BLM.

Please click on below weblinks in email to view and see how you can help this effort.

**********************************************************************************************************

From: A Hoekstra <ajhoekstra@yahoo.com>
Date: October 25, 2018 at 10:57:40 AM MST
To: <ajhoekstra@yahoo.com>
Subject: Restoring rock and fossil collecting in southern Utah (GSENM/KEPA)
Reply-To: A Hoekstra <ajhoekstra@yahoo.com>

Your club can help by co-signing our comment letter, or by writing your own, and by suggesting to your members that they consider making a comment as an individual. Time is of the essence, since your officers need to review this comment letter and vote at your November meetings, for action to meet the November deadline for submitting comments. It would be appreciated if you would share this information with other clubs and individuals who might be interested.

The BLM is proposing to reopen lands in southern Utah to hobby collecting, but they need to hear support from the public. They have solicited comments from interested individuals and organizations. Unfortunately, many conservation organizations are commenting against hobby rock collecting, and these organizations are asking their members to send comments against it. If rock hounds fail to speak up now in favor of hobby collecting, the BLM may have to abandon that part of their "preferred alternative" due to a preponderance of negative comments.

Please take a moment to review some background information (link below), and to read the draft comment letter (attached).
Articles on the subject have appeared in newsletters of several California rock and gem clubs. For example see the San Diego M&GS website: http://www.sdmg.org/articles/201809/Public_Comment_Period_Open_on_Southern_Utah_monuments.pdf

I can send you links to or copies of more articles if you are interested. I will be happy to answer any of your questions.

The BLM is proposing to reopen to hobby rock and fossil collecting not only the land removed from the GSENM (the KEPA), but to allow hobby collecting within specific areas inside the (remaining) GSENM. This would be an important precedent, relevant to management of several recently declared monuments in California and existing monuments elsewhere.

Thank You,

Andrew Hoekstra
562-584-3190
ajhoekstra@yahoo.com
Southern California Paleontological Society, VP
Delvers Gem & Mineral Society, Editor and Treasurer
CFMS, Public Lands Advisory Committee, Paleontological Specialist
MSA September 13th Meeting Highlights.
Chris Whitney-Smith

MSA Associate Photographer/Videography Crew:
Steve Kaminski & Wyatt Busby; Chris Whitney-Smith Photo.

Dr. Carleton Moore examining potential meteorite (ended up being a meteorwrong after analysis);
Chris Whitney-Smith Photo.

NEW MSA Video Screen Microscope
Dr. Nathan Scholten helped acquire;
Chris Whitney-Smith photo.

Various Minerals from MSA Epic 2018 Colorado Field Trip to Mt. Antero, Hartsel, Smokey Hawk and Calumet mines; Steve Kaminski Photo.
MSA September 13th Meeting Highlights.

Chris Whitney-Smith

Super Mike Fleeman hoisting Mega Meteorite over his head; Mike Fleeman Collection, Steve Kaminski photo.

Pallasite Meteorite exhibiting gemmy Olivine; Mike Fleeman Collection, Chris Whitney-Smith photo.

Large Lunar Mass (Sweet Chuck of The Moon); Mike Fleeman Collection, Chris Whitney-Smith photo.

Ancient War Hammer with Azurite and Malachite, Mike Fleeman Collection; Chris Whitney-Smith photo.

Meteorite; Mike Fleeman Collection, Chris Whitney-Smith photo.
Top: My Precious! Lucky Juniors and their Mineral Treasures
Below: Happy Raffle and Silent Auction Winners.

Steve Kaminski Photos
MSA September 13th Meeting Highlights.
Chris Whitney-Smith

Chris presents Mike Fleeman with Certificate of Appreciation for an Amazing Presentation; Steve Kaminski Photo.

Mr. Mineral (Dana Slaughter) viewing meteorites from Fleeman Collection; Steve Kaminski Photo.

Fortunate Raffle Winners.
Steve Kaminski Photos
**October 11, 2018 Program:**
"The Art of Setting Up Your Case to Be Judged – And Why You Should Do It!
Presented by Miss Lauren Megaw

Our **October 11th program** will be presented by **Miss Lauren Megaw**, an accomplished collector and award-winning exhibitor on "The Art of Setting Up Your Case to Be Judged – And Why You Should Do It!" Lauren’s talk is especially meaningful for MSA junior competitive exhibitors. Lauren will discuss why displaying your collecting in a competitive environment is one of the best ways to improve your collection and potentially nerve wracking; everyone is judging you (literally that is what you signed up for)! Over the course of her talk she will discuss why you should compete (and no, it’s not about the trophies though they are shiny), tips and tricks for putting together the best case possible, and even looking at the way specimens are judged. Yes, there will be a test at the end, but there are no right answers. Another facet of the talk will be the importance of mentorship both for competitors as well as the hobby at large.

Lauren started her journey in the mineral world essentially in utero. The daughter of Dr. Peter Megaw (Exhibits Chair of the Tucson Gem and Mineral Show®), Lauren grew up in the hobby. When she was really young, she began competing in the Tucson Gem and Mineral Show®, this provided her with consistent critique each year for her collection, as well as, community and self-created motivation to continue developing and refining her collection. Competition also spurred her to start LAM Minerals, a way to raise funds to better build up her Team of minerals. During her tenure as a competitor, she won Best Junior 2 times, Junior Master (4 times before being allowed to compete against the adults), Novice, Advanced and Master, Lidstrom Trophy (2008 and 2011), and finally Desautels Trophy (2011).

Young Lauren was featured in BlueCap Productions DVDs of “The New Crystal Hunters” in Pala, California and “Smoky Hawk” in Colorado showcasing junior mineral collectors in the field. Collecting shaped much of her childhood, so it’s not surprising that her college admissions essay was about collecting at the Rogerly Mine in Weardale, United Kingdom. At University of Arizona, she conducted an independent study in optical mineralogy, and even did the optical measurements for the new mineral Yangite PbMnSi$_3$O$_8$•H$_2$O under the watchful eye of Dr. Stan Evans and Dr. Bob Downs. The summer before her junior year in high school, she interned at the Harvard Mineral Museum under the wing of the renowned Dr. Carl Francis. Lauren's love of minerals turned into a love for science, and she now is finishing up her degree in Geology at Stanford University. She is extremely passionate about getting other young people stoked on collecting minerals (in whatever capacity possible), which is why she is proud to present for Mineralogical Society of Arizona.
October 11, 2018 Program—Continued:

Lauren Megaw mentoring MSA Juniors after 2018 Tucson Gem & Mineral Show®. MSA Juniors Erika Brown won Best Junior Master TNs, David Tibbits Best Junior TNs, and Wyatt Busby 2nd Place Junior TN’s; Chris Whitney-Smith Photo.


Lauren Megaw & Gawain Fiore Crystals & Crystal Forms Exhibit at 2018 Tucson Gem & Mineral Show®; Chris Whitney-Smith Photo.
Mineral of the Month: MINERAL SPECIES NAMED IN HONOR OF MSA MEMBERS
By Dr. Ray Grant and Chris Whitney-Smith

Minerals of the Month for October are Bobjonesite, Raygrantite, Ruizite and Rongibbsite. These four minerals are named for Bob Jones, Ray Grant, Joe Ruiz and Ron Gibbs, all Life Members and a Future Life Member of Mineralogical Society of Arizona.

These four minerals are listed under International Mineralogical Association (IMA) updated September 2018. IMA provides a comprehensive list of all valid mineral species. The list is distributed via the web site of the Commission on New Minerals, Nomenclature and Classification of the International Mineralogical Association, which is the organization in charge for approval of new minerals, and more in general for all issues related to the status of mineral species. The list, which will be updated on a regular basis, is intended as the primary and official source on minerals. Visit www.ima-mineralogy.org/index.htm to view and download list.

Explanation of IMA column headings:

- **Name:** it is the presently accepted mineral name (and in the table, minerals are sorted by name).
- **CNMMN/CNMNC approved formula:** it is the chemical formula of the mineral.
- **IMA status:**
  - A = approved (it applies to minerals approved after the establishment of the IMA in 1958);
  - G = grandfathered (it applies to minerals discovered before the birth of IMA, and generally considered as valid species);
  - Rd = redefined (it applies to existing minerals which were redefined during the IMA era);
  - Rn = renamed (it applies to existing minerals which were renamed during the IMA era);
  - Q = questionable (it applies to poorly characterized minerals, whose validity could be doubtful).
- **IMA No. / Year:** for approved minerals the IMA No. is given: it has the form XXXX-YYY, where XXXX is the year and YYY a sequential number; for grandfathered minerals the year of the original description is given. In some cases, typically for Rd and Rn minerals, the year may be followed by s.p. (special procedure): it refers to the year in which a specific action (redefinition and/or renaming) took place, and was approved by IMA. This may be related to the approval of a report by a dedicated subcommittee on a given group of minerals.
- **Country:** it is the country in which the mineral was discovered for the first time (according to the national boundaries as of today).
- **First reference:** it is the original reference for each mineral.
- **Second reference:** it is the most recent or most complete reference for each mineral, possibly including a crystal structure study.
- **Caveat (IMPORTANT):** the list includes selected information on the **5389 currently valid species**; inevitably there will be mistakes in it.

*Members are invited to bring one sample from their collection of the mineral of the month and give a brief story about where they obtained it or something about the specimen.*

*Unknown minerals for identification can still be brought to the meetings*
BOBJONESITE is a hydrated vanadium sulfate, \( \text{VO} (\text{SO}_4) \cdot 3\text{H}_2\text{O} \). It is monoclinic, has a hardness of 1, and is pale blue to blue green in color. It forms as efflorescences and crusts and will hydrate on exposure to air. It was first found at the North Mesa Mine Group in Emery County, Utah in a coal-clad, pyritiferous silicified tree in the Triassic age Shinarump conglomerate. Since then it has been found Bessie G Mine in La Plata County, Colorado and in fumaroles at the Tolbachik Volcano in Kamchatka, Russia.

**Bob Jones Mineralogical Society of Arizona Legacy:**
- MSA Past President (1964)
- MSA Milestone Life Member
- MSA Hall of Fame Inductee 2014

**International Mineralogical Association (IMA) LISTING**
- **Name**
  - Bobjonesite
- **CNMMN/CNMNC approved formula**
  - \( \text{V}^4+\text{O}(\text{SO}_4) \cdot 3\text{H}_2\text{O} \)
- **IMA Status**
  - A
- **IMA No. / Year**
  - 2000-045
- **Country**
  - USA
- **First reference**
  - Canadian Mineralogist 41 (2003), 83
- **Second reference**

Bob Jones shown with silicified log and its coalified margin that hosts bobjonesite and other sulfate minerals; North Mesa No. 5 Mine, Emery County, Utah, U.S.A. Bob Jones Photo.
Mineral of the Month: MINERAL SPECIES NAMED IN HONOR OF MSA MEMBERS
By Dr. Ray Grant and Chris Whitney-Smith

RAYGRANTITE is a lead zinc sulfate silicate $\text{Pb}_{10}\text{Zn}(\text{SO}_4)_6(\text{SiO}_4)_2$. It is triclinic, has a hardness of 3, and is colorless. It forms as a secondary alteration of primary sulfide minerals and was found in a mass of galena with other secondary minerals. So far it has only been found at the Evening Star Mine, in Maricopa County, Arizona.

Ray Grant Mineralogical Society of Arizona Legacy:
- MSA Past President (1976-1977 and 2012-2013)
- MSA Milestone Life Member
- MSA Hall of Fame Inductee 2014

International Mineralogical Association (IMA) LISTING
- Name Raygrantite
- CNMMN/CNMNC approved formula $\text{Pb}_{10}\text{Zn}(\text{SO}_4)_6(\text{SiO}_4)_2(\text{OH})_2$
- IMA Status A
- IMA No. / Year 2013-001
- Country USA
- First reference Canadian Mineralogist 54 (2016), 625
- Second reference

Visit Mineralogical Society of Arizona Sponsored Mindat Page
http://www.mindat.org/min-43868.html

RAYGRANTITE $\text{Pb}_{10}\text{Zn}(\text{SO}_4)_6(\text{SiO}_4)_2$. Evening Star Mine, Maricopa County, Arizona, U.S.A.

Photo courtesy of Hon. Joe A. Ruiz.

DR. RAYMOND W. GRANT; Ray Grant Photo.

DR. RAYMOND W. GRANT; Ray Grant Photo.

Ray Grant 1-1/2 years old starting his 1st rock collection. Proof rocks and minerals were in his blood!
Ray Grant Photo circa June 1941.
Mineral of the Month: MINERAL SPECIES NAMED IN HONOR OF MSA MEMBERS

By Dr. Ray Grant and Chris Whitney-Smith

RUIZITE is a hydrated calcium manganese silicate, Ca$_2$Mn$_2$Si$_4$O$_{11}$(OH)$_4$·2H$_2$O. It is monoclinic, has a hardness of 5, and is orange to red-brown in color. It forms as an alteration mineral in contact metamorphic limestone deposits. It was first found at the Christmas Mine in Gila County, Arizona and later in Italy, South Africa, and Cornwall, Pennsylvania.

Joe Ruiz Mineralogical Society of Arizona Legacy:
- MSA Legacy Life Member

International Mineralogical Association (IMA) LISTING
- **Name**
  - Ruizite
- **CNMMN/CNMNC approved formula**
  - Ca$_2$Mn$_3^+$·2Si$_4$O$_{11}$(OH)$_4$·2H$_2$O
- **IMA Status**
  - A
- **IMA No. / Year**
  - 1977-007
- **Country**
  - USA
- **First reference**
  - Mineralogical Magazine 41 (1977), 429
- **Second reference**
  - American Mineralogist 70 (1985), 171

RUIZITE Ca$_2$Mn$_2$Si$_4$O$_{11}$(OH)$_4$·2H$_2$O, Christmas Mine, Gila County, Arizona, U.S.A.
Photo courtesy of Mr. Harvey Jong.

HON. JOE A. RUIZ with wife Rose; Joe Ruiz Photo.

Joe behind the microscope at his home in Mammoth, AZ;
Chris Whitney-Smith Photo circa May 2015.
Mineral of the Month: MINERAL SPECIES NAMED IN HONOR OF MSA MEMBERS
By Dr. Ray Grant and Chris Whitney-Smith

RONGIBBSITE is a zeolitic aluminosilicate and first natural aluminosilicate with lead Pb₂(Si₄Al)O₁₁(OH). It is monoclinic, has a hardness of 5, and is colorless. It forms radiating, bladed to prismatic colorless crystals. So far it has only been found at the Evening Star Mine, Maricopa County, Arizona.

Ron Gibbs Mineralogical Society of Arizona Legacy:
- MSA Member

International Mineralogical Association (IMA) LISTING
- Name Rongibbsite
- CNMMN/CNMNC approved formula Pb₂(Si₄Al)O₁₁(OH)
- IMA Status A
- IMA No. / Year 2010-055
- Country USA
- First reference American Mineralogist 98 (2013), 236
- Second reference

Visit Mineralogical Society of Arizona Sponsored Mindat Page
https://www.mindat.org/min-41131.html
Photo courtesy of RRUFF.info.

RON GIBBS at Joe Ruiz Memorial Exhibit 2018 Tucson Gem & Mineral Show®; Chris Whitney-Smith Photo.

RON GIBBS with lucky rabbit; Ron Gibbs Photo.
A recent field trip to the well-known zeolite locality at Malpais Hill, Pinal County, Arizona, resulted in the discovery of three minerals not previously reported from there: hematite, pseudobrookite, and tridymite. One expects to see these minerals in vesicles in rhyolite, rather than the basalt and basaltic andesite that the north railway cut is noted for. A little explanation is clearly in order.

While collecting pieces of fallen rock along the west side of the cut, I encountered a piece of coarse scoria, about twice the size of a clenched fist, possibly a volcanic bomb. The large vesicles were well-weathered, and yellow in color. Breaking the piece revealed that most of the larger vesicles in the interior were also weathered to this color, but a very small number of the smaller vesicles were not: instead, they were pale gray, and retained their original mineralization. (The unweathered rock between vesicles is pale reddish-gray in color, and quite fine-grained.) Immediately apparent in these smaller cavities were tiny hexagonal plates of black hematite, about 0.3 mm. in width. Some also contained the usual thin, glassy plates of tridymite that one expects to see in higher-temperature extrusive rocks like rhyolite. And there were a very few long prismatic, striated crystals of pseudobrookite, black in color, that look much like those from the Big Lue roadcuts in Greenlee County, Arizona.

This was an exciting find for me, as I never expect to find anything new in such a well-known location. One of the joys of micro-mounting: many collectors just don't see anything tiny..........!
Hi AZ MM&NREM Friends and Supporters,

Now that the weather is starting to get cooler, we hope to ramp up our Monday Crew activities at the Mining and Mineral Museum building once again. Charlie and the stamp millmen are finalizing the stamp mill for practice runs and in anticipation of public events.

We’re starting to map out the different rooms in the building with the expectation of moving material from AHS in Tempe. We have purchased a new winch from Harbor Freight to facilitate moving the 5-gallon buckets in and out of the pit, as I anticipate some heavy lifting later this fall.

On Wednesday, October 24th, I met with the new UA Campus Operations manager, Dave Heineking, who will be overseeing our building improvements from this point forward along with UA Facilities. I gave him an overview of what needs to be done so that we can start moving this winter and he is working on a plan with the rest of UA admin. UA Research VP Brooks Jeffery is still campaigning to release funds from state appropriations to hire a project manager, a full-time position that will be based in Phoenix.

In exhibit news, we are working on a new display at the Rosson House downtown that showcases the stages of copper processing from mine to (Victorian) household. It will be in place by mid-November. A big thank you to ESM for the loan of their beautiful tabletop case, which is now standing on the second floor of the Arizona Capitol Museum and holding examples of some of the state symbols: fossil - petrified wood; metal - copper; gem – turquoise; and mineral - wulfenite.

And thanks to all for your continued support and input. We look forward to meeting more volunteers and stakeholders this fall and winter.

Regards,
Catie Carter
cscarter@email.arizona.edu

Support the Museum
Senator Gail Griffin led the way in establishing an account for the museum at the University of Arizona Foundation which can be accessed at the following link: http://tinyurl.com/SupportMM-NREMuseum your donations are appreciated.

If you would like join in the next time there is a call for volunteers at the next museum workday, please contact Charlie Connell at minercon@aol.com.
MARK YOUR CALENDARS:

47th Annual 2018 Flagg Gem & Mineral Show
(Friday-Sunday, January 4th-6th, 2019).
Show Theme “Fossils of Arizona”
Mesa Community College
1833 W Southern Ave
Mesa, AZ 85202

Flagg Show is an informal tailgate format offering a low cost venue for field collectors and local mineral/lapidary clubs to share their latest finds with children, teachers, Rockhounds, and the general public. One goal of this show is to increase the interest of children in rocks, minerals, geology, and science. Children can become interested in science through minerals, crystals, and fossils, and our hope is to encourage their interest. Several groups will have free samples for children and for teachers and there are free activities as well.

Call for Mineral and Fossil Donations.
The Foundation raises most of our funds through mineral sales, and we currently need donations of quality mineral or fossil specimens. So, if you’re running out of space for your collection and/or have some extra specimens that you would like to donate, we would certainly be interested in receiving these items. All donations are tax deductible and a donation letter will be provided! In special cases the Foundation will purchase exceptional specimens or collections. While all contributions are appreciated, we do ask that you help us out by selecting materials that will be suitable for sale to the general public. The Foundation relies solely on volunteers, and with everyone’s busy schedules it can be a bit difficult to go through heaps of unfamiliar, unsorted stuff to find saleable items. For more information on making a donation, please contact richardsonutaz@gmail.com.

27th Annual 2019 Minerals of Arizona Symposium
(Friday-Sunday, April 5th-7th, 2019).
Show Location: Drury Inn & Suites, 1780 West Ranch Rd. in Tempe, AZ.

Learn More at: flaggmineralfoundation.org

Mission
Our Mission is to excite and inspire all generations about earth sciences through educational outreach.

Vision
We envision a community where students and the general public have curiosity about, passion for, and understanding of the underlying principles of earth sciences.

ESM Outreach Update
By Mardy Zimmermann,
Outreach and Education Coordinator

October was a very busy month for the Outreach Program, but in a different way. ESM needed to move material we had inherited from Russ Hart from where it was stored in Queen Creek. Much of the material was crushed into small pieces that he used to make rock and mineral cards for students. We invited clubs and teachers to come and take material that they could use and our large inventory was greatly reduced. Material that ESM could use was taken by members and much was moved to our 1 2/3 acres in Apache Junction where it will eventually be in a fenced lot. I used some of the material for landscaping rings around desert shrubs, which turned out to be quite attractive, and still allowed the material to be available if we should need it.

For more information about the ESM, how to become a member or how to arrange for a school visit or Community function, go to: www.earthsciencemuseum.org.
The Pinal Gem and Mineral Society meets monthly on the third Wednesday at 7pm at the Artisan Village of Coolidge.

Date: Wednesday, November 14, 2018
Program: “Geology, History and Importance of the Tri-State District (Missouri, Oklahoma, and Kansas).”
Speaker: Dana Slaughter

- Field Trip – Sunday, November 11 – Meet at Florence Library at 8 AM, for information call Richard Sichling (801-386-1602)
- December Club Meeting – Wednesday, December 19 – Program is “The World’s Largest Gem and Mineral Show is in Tucson, Arizona”
- January Club Meeting – Wednesday, January 23 (note this fourth Wednesday) – Annual Australia night with program by Dehne McLaughlin from Tasmania, Australia
- Pinal Geology Museum (at Artisan Village) is open every Friday and Saturday from 10 to 2.

Looking for some donations big and small. We have given away hundreds of apache tears to kids and are almost out so if you have some you can donate please do. We are working on a rock dig for kids next to the building. They will be able to collect some specimens to take home. We will do desert landscaping around the dig area and I would like to add some mining memorabilia. If you have or know someone who has ore carts, ore buckets or other appropriate items that they are willing to donate (tax deduction) please contact me raycyn@cox.net.

DANA SLAUGHTER with Arthur L. Flagg Collection;
Photo courtesy Ray Grant.
MSA FIELDTRIPS

** MSA HOSTS COALITION FIELD TRIP 4TH WEEKEND IN FEBRUARY ANNUALLY **

- RSVP REQUIRED FOR ALL MSA FIELD TRIPS fieldtrips@msaaz.org.
- IN EVENT LESS THAN (5) MEMBERS RSVP, TRIP LEADER MAY CANCEL TRIP
- PLEASE ALLOW 24 HOURS FOR FIELD TRIP TEAM RESPONSE.
- DATES MAY CHANGE AND TRIPS MAY BE ADDED OR REMOVED
- OVERNIGHT TRIPS COULD ALSO BE DAY TRIPS
- PRINT OUT FIELD TRIP INFO & MAP TO BRING ON MSA FIELD TRIPS

Important information: MSA membership is required to go on field trips. You can become a member at meetings, mineral shows MSA attends, at meet up location for field trips or by downloading membership application from msaaz.org under MSA CLUB tab. MSA field trips are a privilege of membership; however, MSA is open to joint ventures with other clubs and of course, coalition trips are open to all.

We want to hear from you! Let us know what you think of the trips. How was your experience? Or you could tell us your version of the trip report. Your article or parts of it may be used in the RR, Facebook, on our website msaaz.org or for other promotional purposes.

Please use fieldtrips@msaaz.org for all field trip questions, comments or concerns.

All trip leaders have access to this email account and it will get you the fastest response.
### 2018 MSA Fieldtrips

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<th>Date</th>
<th>Location</th>
<th>Minerals</th>
<th>Leader</th>
<th>Vehicle Required</th>
<th>Extraction Difficulty</th>
<th>Site Terrain</th>
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<td>Blue Cube Mine</td>
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<td>Jeff Craig</td>
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<tr>
<td><strong>January 27th</strong></td>
<td>Round Mtn</td>
<td>Fire agate</td>
<td>Mike Brown</td>
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<td><strong>February 24th</strong></td>
<td>Lion Springs</td>
<td>Almandine</td>
<td>Joseph Philpott</td>
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<td><strong>March 4th</strong></td>
<td>Florence</td>
<td>Selenite roses</td>
<td>Joseph Philpott</td>
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<tr>
<td><strong>March 24th-25th</strong></td>
<td>Planet Mine</td>
<td>Malachite, Hematite, Chrysocolla</td>
<td>Cody Schwenk</td>
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<tr>
<td><strong>April 7th</strong></td>
<td>Corral Nuevo</td>
<td>Geodes</td>
<td>Mike Brown</td>
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<td><strong>April 28th</strong></td>
<td>Bagdad</td>
<td>Pastellite</td>
<td>Nathan Scholten</td>
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<td><strong>May 12th</strong></td>
<td>4 Metals Mine</td>
<td>Rhodochrosite, Pyrite</td>
<td>Cody Schwenk</td>
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<td><strong>May 19th</strong></td>
<td>Lake Pleasant</td>
<td>Calcite, Opal</td>
<td>Mike Brown</td>
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<tr>
<td><strong>June 23rd-24th</strong></td>
<td>Winslow</td>
<td>Petrified Wood</td>
<td>Mike Brown</td>
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<tr>
<td><strong>July 20th-23rd</strong></td>
<td>Colorado</td>
<td>Aquamarine, Topaz, Barite, Smokey Quartz &amp; Amazonite, Epidot</td>
<td>Eric Putman</td>
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<td><strong>August 18th-19th</strong></td>
<td>CANCELED</td>
<td>CANCELED No Replacement</td>
<td>Jeff Craig</td>
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<tr>
<td><strong>September 15th</strong></td>
<td>Mingus Mtn</td>
<td>Agate, Fossils</td>
<td>Nathan Scholten</td>
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<tr>
<td><strong>September 29th-30th</strong></td>
<td>Anderson Mine/ Lead Pill Mine</td>
<td>Carnotite, Weeksite, Agate, Fluorite</td>
<td>Jeff Craig</td>
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<tr>
<td><strong>October 13-14</strong></td>
<td>Trona</td>
<td>Halite, Hanksite</td>
<td>Joseph Philpott</td>
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<td><strong>November 3rd</strong></td>
<td>Saddle Mountain</td>
<td>Chalcedony, Fire Agate</td>
<td>Nathan Scholten</td>
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<td><strong>November 10th</strong></td>
<td>Mistake Mine</td>
<td>Pyrolusite, Ramsdellite, Barite</td>
<td>Eric Putman</td>
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<td><strong>November 17th</strong></td>
<td>Finch Mine/Greyhorse Mine</td>
<td>Wulfenite, Vanadinite</td>
<td>Mike Brown</td>
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<td><strong>December 1st-2nd</strong></td>
<td>Red Cloud Mine</td>
<td>Wulfenite</td>
<td>TBD</td>
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<td><strong>December 16th</strong></td>
<td>St. David</td>
<td>CANCELED No Replacement</td>
<td>Cody Schwenk</td>
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**Site Terrain:**
- EASY
- MODERATE
- HARD
- EXTREMELY DIFFICULT

**Vehicle Required:**
- 2WD
- HIGH CLEARANCE 2WD
- 4X4
- HIGH CLEARANCE 4X4
MSA FIELD TRIP: TRONA
October 13th-14th, 2018

TRONA
OCTOBER 13TH-14TH 2018

TRIP DESCRIPTION
We will be joining many fellow rockhounds from around the country to collect Halite, Hanksite and possibly some rarities in the town of Trona. This trip is run by Searles Lake Gem and Mineral Society each year. The first trip is on Saturday October 13th at 9am therefore our meet up is on Friday October 12th, so we can give everyone the rundown on how this trip works and answer all questions before the fast-paced action starts. Leaders will not be at the meetup site between 1pm-7pm but will be available the rest of the day and most likely long into the night. See Trona flyer for trip times and fees. Camping is $8 per night there are restrooms and outdoor showers. No fires on the ground. We will have a metal bin you are welcome to bring your own. These trips are kid friendly. No animals allowed in the digging areas. Bring clothes you are ok sacrificing to the salt. You will get muddy, smelly, wet and have a good time! For more info visit:
http://www1.iwvisp.com/tronagemclub/GEM-O-RAMA.htm
MSA FIELD TRIP: TRONA
October 13th-14th, 2018

Day 1 Trip 1
Mud collecting site.
You will get mud on you.

Day 1 Trip 2
Blow Hole
Plant workers bring up minerals in brine from beneath the ground for us. Usually have a demonstration halfway through.
Day 2
Halite collecting location. You will be in water or near water. I know it’s on a Sunday but leave the nice clothes at home. The salt is sharp and after collecting for over 4hrs it will tear you up.
**MSA FIELD TRIP: TRONA**

**October 13th-14th, 2018**

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**DIRECTIONS**

400 Valley Wells Rd, Trona, CA 93562
7 h 9 min (456 miles)
via I-10 W

- Get on I-10 W from W Washington St and W Adams St
- Follow I-10 W to US-395 N in Hesperia. Take exit 141 from I-15 N
- Follow US-395 N and Trona Rd to Stockwell Mine Rd in Homewood Canyon-Valley Wells

---

**Map**

- Leaders Here
- Camp anywhere inside line
- Valley Wells
- Arizona
- California
- Joshua Tree National Park
- San Bernardino National Forest
- Santa Ana National Wildlife Refuge
- Kofa National Wildlife Refuge
- Colorado National Monument
- Grand Canyon National Park
- Las Vegas
- Phoenix
- Flagstaff
- Prescott National Forest
- Flagstaff
- Coconino National Forest
- Prescott National Forest
- Sedona
- Tucson
- Phoenix
- Las Vegas
MSA FIELD TRIP: SADDLE MOUNTAIN
November 3, 2018

QUARTZ; Don & Dawn Boushelle Photos.

QUARTZ Var Chalcedony SiO₂. Saddle Mountain, Maricopa County, Arizona, USA; © John Sobolowski.

TRIP LEADER
Name: Nathan Scholten
Phone: (602) 418-5896
Vehicle: Tan 4x4 Sport Van.

MEET UP INFO
Location:
Shell Station in Tonopah
41112 Indian School Rd,
Tonopah, AZ 85354
Date: November 3, 2018
Time: 8:00AM
Depart: 8:30AM

MATERIAL TO COLLECT
• Chalcedony
• Fire Agate

SADDLE MOUNTAIN CHALCEDONY
SATURDAY, NOVEMBER 3, 2018

** October Trip for Apache Tears Canceled **
• Saddle Up! MSA headed to an oldie but a goodie, Saddle Mountain!
• Trip is geared for juniors; however, all are welcome.
• We will be collecting chalcedony and if lucky, fire agate.
• The collecting sites are accessible to most vehicles and collecting is easy.
• Come prepared with snacks, water and a full tank of gas.
• Please RSVP to fieldtrips@msaaz.org.
MSA FIELD TRIP: SADDLE MOUNTAIN
November 3, 2018

DIRECTIONS

From Phoenix take I-10 West to exit 94 (411th Ave)
Turn left onto 411th Ave (signs for Tonopah)
Arrive at Shell Gas Station on left (west)

Saddle Mountain, Maricopa County, Arizona, USA.
© http://www.fireagate.us/fire-agate/saddlemountain.shtml
MSA FIELD TRIP: MISTAKE MINE
November 10, 2018

TRIP LEADER
Name: Eric Putman
Phone: (602) 515-6380
Vehicle: Tan Isuzu Rodeo

MEET UP INFO
Location:
Shell Station w/ Filiberto’s
530 E Wickenburg Way,
Wickenburg, AZ 85390

Date: November 10, 2018
Time: 8:30AM
Depart: 9:00AM

MATERIAL TO COLLECT
- Ramsdellite
- Pyrolusite
- Barite

TOOLS and ESSENTIALS
- Hammer
- Chisel
- Pick
- Pry Bar
- Hand Rake
- Gloves
- Sun Screen
- Hat
- Water

MISTAKE MINE
SATURDAY, NOVEMBER 10, 2018

- Come test your metal against the magnesium deposits at the Mistake Mine.
- Everything about this trip will be difficult, so come prepared for anything.
- This trip caters to the more extreme Rockhound.
- 4x4 IS REQUIRED due to loose, powdery sand in the Hassayampa river bed.
- There is a short, but steep and challenging hike to the collecting area.
- Mineral collection will be hard rock mining. There is limited material in the tailings.
- Come prepared with water and a full tank of gas.
- MUST RSVP to fieldtrips@msaaz.org.
MSA FIELD TRIP: MISTAKE MINE MAP
November 10, 2018

DIRECTIONS

- From Phoenix take I-17 North
- Take exit 223A for Carefree Hwy. Use the left 2 lanes to turn left onto AZ-74 W/W Carefree Hwy
- Turn Right on US-60 W. towards Wickenburg
- Arrive at the Large Shell Station on right(east).
MSA FIELD TRIP: FINCH MINE
November 17, 2018

TRIP LEADER
Name: Mike Brown
Phone: (480) 228-4297
Vehicle: Black Nissan Titan

MEET UP INFO
Location:
Family Dollar
302 Alden Rd
Kearney, AZ 85137
Date: November 17, 2018
Time: 8:30AM
Depart: 9:00AM

MATERIAL TO COLLECT
- Wulfenite
- Vanadinite
- Quartz
- Hemimorphite

TOOLS and ESSENTIALS
- Hammer
- Chisel
- Pick
- Pry Bar
- Hand Rake
- Gloves
- Sun Screen
- Hat
- Water

FINCH MINE
SATURDAY, NOVEMBER 17, 2018

- Challenging roads and collecting at Finch Mine in scenic Dripping Spring Mountains.
- High Clearance 2x4 IS REQUIRED.
- Mineral collection will be hard rock mining.
- Come prepared with water and a full tank of gas.
- MUST RSVP to fieldtrips@msaar.org.
MSA FIELD TRIP: FINCH MINE MAP
November 17, 2018

FINCH MINE
SATURDAY, NOVEMBER 17, 2018

DIRECTIONS

- From Phoenix Head south I-10 E
- Keep right at the fork to continue on US-60 E, follow signs for Mesa - Globe
- Take exit 227 for AZ-177
- Slight right to stay on AZ-177
- Turn right onto Upton Dr
- Turn right into Family Dollar parking lot

6 Mi.
55.2 Mi.
21.9 Mi.
MSA Field Trip to Anderson Uranium Mine was a fun trip for those who braved trip into the Arizona Outback;
Chris Whitney-Smith photos.
Stacey Somero found beautiful specimen with radioactive dendrites and fossils;
Chris Whitney-Smith Photos.

Colorful and interesting fluorescent specimens under Short Wave UV from Anderson Mine;
Chris Whitney-Smith Collection and Photos.
## 2018 MSA MEETING SCHEDULE & MAP

### MSA 2018 Meeting Schedule

<table>
<thead>
<tr>
<th>MEETING DATE</th>
<th>ROOM NAME</th>
<th>START TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 11(^{th})</td>
<td>Padre Serra</td>
<td>7:30 PM</td>
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<tr>
<td>3(^{rd}) Thursday, February 15(^{th})</td>
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<tr>
<td>March 8(^{th})</td>
<td>Padre Serra</td>
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<tr>
<td>April 12(^{th})</td>
<td>Padre Serra</td>
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<tr>
<td>May 10(^{th})</td>
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<td>7:30 PM</td>
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<tr>
<td>June 14(^{th})</td>
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<tr>
<td>July</td>
<td><strong>NO MEETING</strong></td>
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<tr>
<td>August</td>
<td><strong>NO MEETING</strong></td>
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<tr>
<td>September 13(^{th})</td>
<td>Padre Serra</td>
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<tr>
<td>October 11(^{th})</td>
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<tr>
<td>November 8(^{th})</td>
<td>Padre Serra</td>
<td>7:30 PM</td>
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<tr>
<td><strong>Saturday, December 15(^{th})</strong></td>
<td>Padre Serra</td>
<td><strong>5:00 PM</strong></td>
</tr>
</tbody>
</table>

**View of Camelback Mountain, Paradise Valley, Arizona; © Joan Levinson.**

### MSA MEETING PLACE

**Franciscan Renewal Center**  
**Piper Hall**  
**5802 E. Lincoln Drive**  
**Scottsdale, AZ 85253**

Arrive       7:00 PM  
Meeting Starts 7:30 PM

**MEETING ROOMS LOCATED INSIDE PIPER HALL**

*** Parking Behind Piper Hall ***
Upcoming Shows and Events

High Desert Helpers Annual Show
November 2-4, 2018
Fri., Sat., Sun. 9-4
Free Admission
High Desert Park
19001 E. Jacie Lane
Black Canyon City, AZ

Lake Havasu Gem & Mineral Society’s 47th Annual Gem and Mineral Show
November 10-11, 2018
Sat. 9-5, Sun. 9-4
Admission $2,
Children under 12 free
Lake Havasu Community Center
100 Park Avenue
Lake Havasu City, AZ

Apache Junction Rock and Gem Club
Apache Junction Rock and Gem Show
November 17-18, 2018
Sat. 9-5, Sun. 10-4
Adults $3,
Students with ID $1
Children under 12 free
Skyline High School
845 S. Crimson Rd.,
Mesa, AZ

Payson Rimstones Rock Club Annual Show
November 17-18, 2018
Sat. 9-5, Sun. 10-4
Adults, seniors and students $2
Children 12 and under free
Longhorn Gym
W. Longhorn Rd. & N. McLane Rd.
Payson, AZ

Wickenburg Gem & Mineral Society
Wickenburg Gem and Mineral Show
November 24-25, 2018
Sat. 9-5, Sun. 10-4
Admission free
Hassayampa Elementary School
251 South Tegner Street
Wickenburg, AZ

Verde River Rockhounds “Rocks in the Park”
December 1, 2018
Sat. 9-4
Free Admission
Windmill Park
9950 E. Cornville Road
Cornville, AZ

Quartzsite Gem Shows
- Desert Gardens - Gem & Mineral
  January 01 - February 28, 2019
- Tyson Wells Rock & Gem Show
  January 04 - January 13, 2019
- Tyson Wells Sell-A-Rama
  January 18 - January 27, 2019

For more information:
https://www.desertusa

47th Flagg Gem & Mineral Show
Flagg Mineral Foundation
Show Theme “Fossils of Arizona”
January 4th, 5th and 6th, 2019
9-5 each day
Admission and Parking FREE
Mesa Community College
West parking lot on Dobson just north of the Superstition Freeway
(Rt. 60), Mesa AZ

Tucson Gem & Mineral Show®
Show Theme “Wulfenite Is Loved”
February 14-17, 2019
Thursday – Saturday 10-6
Sunday 10-5
SMG Tucson Convention Center
260 S. Church Ave, Tucson

The largest and most prestigious gem and mineral show in the world.
47th Annual Flagg Gem & Mineral Show
January 4-6, 2019
Poster By MSA/FMF Member Don Boushelle.
Volunteers Needed for MSA Spinning Wheel Booth
Flagg Gem & Mineral Show January 4-6, 2019
Chris Whitney-Smith

MSA “Spinning Wheel” Booth Volunteer Schedule at Flagg Gem and Mineral Show:
January 4th, 5th & 6th 2019

Please review blank yellow Time Slots for available volunteer times.
Call, text or email me with questions or concerns. Thank You.
Chris Whitney-Smith. Ask.ChrisWS@yahoo.com or (602) 405-1502.
Please RSVP your Days and Time Slots.
Volunteers receive raffle tickets for special prize drawing.
65th Annual Tucson Gem & Mineral Show®
February 14-17, 2019

The Tucson Gem and Mineral Society Proudly Presents:

THE 65TH ANNUAL TUCSON GEM AND MINERAL SHOW®

WULFENITE IS LOVED
Tucson Convention Center
February 14-17, 2019

Featuring:
Retail Dealers | Exhibits
A "Micro" Room
Free Lectures
Junior Education
Saturday Night Program

For more information, visit: www.tgms.org
2019 Tucson Gem and Mineral Show® Competitive Exhibits

To: Potential Competitive Exhibitor

Please join us at the 65th Annual Tucson Gem and Mineral Show®, February 14-17, 2019. The numerous mineral collectors and visitors who enjoy viewing beautiful exhibits will appreciate your participation in the Show. Your competitive exhibit(s) will add greatly to the Show. The area for the competitive exhibits will be right at the center of the Exhibition Hall this year. This will really highlight your exhibit and the others who compete.

The Tucson Gem and Mineral Society and Show Committee are very interested in promoting interest in young exhibitors. Each junior age exhibitor, regardless of which exhibitor class they enter, will receive a $100 check from Dr. Rob Lavinsky of The Arkenstone. He wishes to help encourage young collectors to exhibit and compete and this is his way of honoring those adults who helped him when he was a junior-age collector. The high point score by a junior-age exhibitor will receive a $500 check and the second high point score will receive a $300 check, regardless of the exhibitor category.

The various applications are included to enable you to enter competitively. If you need any additional information, please write or call the TGMS Office or contact me directly. If you require additional applications, you may photocopy the attached forms or contact the TGMS Office for extra copies. You will also receive a Display Case Information Sheet.

Applications must be submitted to the TGMS Office no later than December 7, 2018. Please include the Competitive Exhibitor Application, the signed Agreement and Show ID Form. Due to increasing security concerns, ALL competitive entries, including those for the Special Trophies and Best of Theme competitions, shall require a signed Competitive Exhibitor Agreement. No Agreement, No Entry.

The Tucson Gem and Mineral Show® theme for 2019 is “Wulfenite is Loved.” Trophies will be awarded for the best specimen in each of five size categories and lapidary/jewelry in the Best of Theme competition. An individual is eligible to enter a specimen in each category. A new category has been added for self-collected specimens and this is separate from the other six categories. This competition is open to all individuals and entries will be accepted between 4:00 pm and 6:00 p.m. on Wednesday, February 13, 2019.

The Show Committee awards five special trophies to honor those who have contributed to mineralogy and the collecting hobby. The Desautels Trophy is for the “Best Case of Minerals in the Show,” with the emphasis on quality and aesthetics of the specimens. The Lidstrom Trophy is awarded to the best single specimen contained within a competitive exhibit. The Yedlin Trophy is awarded to the best case of Master micromounts. The Bideaux Trophy is awarded to the best single Arizona specimen entered in this competition. The Romero Trophy is awarded to the best Mexican specimen or case in the Show. Any case or specimen to be judged for these trophies, except the Romero, must have a signed Competitive Exhibitor Agreement submitted.

If you have any questions or need more information, please contact me at (602) 370-0639 or email: presmyk@cox.net, or the Tucson Gem and Mineral Society office at 520-322-5773, or email: tgms@tgms.org.

We look forward to receiving your application.

Sincerely,

Les Presmyk
Competitive Exhibits Chairman
**Wirewrapping Classes**

**Joanne Hesterman**

---

**Wirewrapping Class**

**Instructor:**

Joanne Hesterman

**Location:**

Fuddruckers
8941 N Black Canyon Hwy,
Phoenix, AZ 85021
(SE Corner of I-17 & Dunlap)

**Class Dates:**

3rd Saturday every Month.

**Time:**

Fuddruckers OPENS: 11:00AM
CLASS HOURS: 11:30AM – 4:00PM (+/-)

**Cost:**

Buy lunch at Fuddruckers.
Great food and good variety.

**Supplies:**

* Bring jewelry tools if you have them.
* Joanne will sell wire or bring your own

* No Contact Info, just show up.

---

Examples of wirewrapping;
Chris Whitney-Smith Collection & Photo.

Examples of wirewrapping by MSA Member Sharleen Harvey;
On Exhibit at Rice Museum of Rocks & Minerals,
© Chris Whitney-Smith.
LAPIDARY WORK SHOP

INSTRUCTOR:
Doug Duffy

Doug advised they are in planning stages for a Lapidary Workshop at North Mountain Visitor Center in Phoenix. They have not received all of the machines and have not finalized class and per hour charges yet. He is planning classes for Wed. mornings from 9-12 when they get up and running and that all users will have to be certified by Doug as to proper use of the equipment. Doug expects shop to have 3 Kingsley North stainless steel lapidary machines with 6-6” diamond wheels (pictured) and only one trim saw. No slab saw. Doug will have his Ringleader available that has two 6” wheels; one a 60 grit and one a 600 grit. More info later.

LAPIDARY CLASSES

In The Art of Making Cabochon. Lapidary is the art of cutting and polishing of rocks.

In this four week class, you will learn the steps in making a cabochon (a domed stone).

DAY/TIME: Wednesday’s from 9AM to 12PM.
COST: $60 for 12 hours of instruction
(Students limit per class 4)

SILVERSMITHING CLASSES

In the four week class, you will learn to make a ring and a pendant.

DAY/TIME: Saturday’s from 8AM to 12PM.
COST: $150 for 15 hours of Instruction.
(Students limit per class 4)

LOCATION:
NORTH MOUNTAIN VISITOR CENTER
12950 N. 7th ST, Phoenix, AZ 85022

For more information and sign up, please call
DOUG DUFFY, INSTRUCTOR
(602) 973-4291 after 2PM or leave message.

Chris Whitney-Smith, Curator MSA Mineral Collection.

When in Tucson, plan to visit University of Arizona Gem & Mineral Museum to view Mineralogical Society of Arizona (MSA), Flagg Mineral Foundation (FMF) and several suites of other fine mineral collections.

UA Mineral Museum is located within Flandrau Science Center & Planetarium, 1601 E. University BLVD, Tucson, AZ 85721.

⇒ MSA & FMF Members have FREE admission to UA Gem & Mineral Museum while our Mineral Collections are on exhibit.

**Hours of Operation:**
- Monday-Wednesday: 10am - 3pm
- Thursday-Friday: 10am - 3pm, 6pm - 9pm
- Saturday: 10am - 9pm
- Sunday: 1pm - 4pm

**Parking:**
Convenient parking available at the Cherry Avenue Garage for a small fee. Free street & surface parking is available on weekends (game days excluded).

**MSA signs 10 year loan agreement with UA Gem & Mineral Museum good through November 30, 2024.**

Visit UAMM and check out the many terrific collections on exhibit.

**AZURITE**, Cu$_3$(CO$_3$)$_2$(OH)$_2$, Bisbee, Cochise County, Arizona, USA; Mineralogical Society of Arizona Collection, © Jeff Scovil.

**AZURITE**, Cu$_3$(CO$_3$)$_2$(OH)$_2$, and **MALACHITE**, Cu$_2$CO$_3$(OH)$_2$, Bisbee, Cochise County, Arizona, USA; Mineralogical Society of Arizona Collection, © Chris Whitney-Smith.

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**LEARN MORE**
- msaaz.org
- flandrau.org
- uamineralmuseum.org
- flaggmineralfoundation.org
American Federation of Mineralogical Societies

Mineralogical Society of Arizona (MSA) members in good standing are members by affiliation of American Federation of Mineralogical Societies (AFMS). AFMS website is terrific educational resources to stay current on what's happening in our awesome hobby. Thank you for your membership and please enjoy all the benefits, privileges and opportunities as members of MSA & AFMS.

Purpose of the AFMS: To promote popular interest and education in the various Earth Sciences, and in particular the subjects of Geology, Mineralogy, Paleontology, Lapidary and other related subjects, and to sponsor and provide means of coordinating the work and efforts of all persons and groups interested therein; to sponsor and encourage the formation and international development of Societies and Regional Federations and by and through such means to strive toward greater international good will and fellowship.

"Code of Ethics"

- I will respect both private and public property and will do no collecting on privately owned land without permission from the owner.
- I will keep informed on all laws, regulations or rules governing collecting on public lands and will observe them.
- I will, to the best of my ability, ascertain the boundary lines of property on which I plan to collect.
- I will use no firearms or blasting material in collecting areas.
- I will cause no willful damage to property of any kind such as fences, signs, buildings, etc.
- I will leave all gates as found.
- I will build fires only in designated or safe places and will be certain they are completely extinguished before leaving the area.
- I will discard no burning material - matches, cigarettes, etc.
- I will fill all excavation holes which may be dangerous to livestock.
- I will not contaminate wells, creeks, or other water supplies.
- I will cause no willful damage to collecting material and will take home only what I can reasonably use.
- I will practice conservation and undertake to utilize fully and well the materials I have collected and will recycle my surplus for the pleasure and benefit of others.
- I will support the Rockhound project H.E.L.P. (Help Eliminate Litter Please) and will leave all collecting areas devoid of litter, regardless of how found.
- I will cooperate with field-trip leaders and those in designated authority in all collecting areas.
- I will report to my club or federation officers, Bureau of Land Management or other authorities, any deposit of petrified wood or other materials on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes.
- I will appreciate and protect our heritage of natural resources.
- I will observe the "Golden Rule", will use Good Outdoor Manners and will at all times conduct myself in a manner which will add to the stature and Public Image of Rockhounds everywhere.

Sandy Fuller
AFMS President
president@rmfms.org

American Federation of Mineralogical Societies
AMFED.org
PURPOSE: To promote popular interest and education in Earth Science, and related fields (Geology, Mineralogy, Paleontology, and Lapidary arts). To foster a fellowship among individuals interested in Earth Science and enable our members to better identify materials we collect, and how to display or further process these materials. To teach all generations about rocks, minerals, fossils, and what can be done with them, and be collaborative in community of groups with similar interests to our Society.

MEETINGS: 7:30 p.m. Second Thursday of the month, September through June; however, must confirm meeting location, dates and times at MSA website msaaz.org.

CONTACT US: MSAClub1935@msaaz.org

Annual Dues / Rates
Couple - $36.00
Single Adults - $24.00
Junior (Under 18), Honorary and MSA Milestone Life members - FREE

MSA Legacy Life members are FREE (after the initial payment).
For information about purchasing a Legacy Life Membership based on your age, please visit our website: msaaz.org and click on “MSA Club” tab.

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