

sy mountain rockchi

The purpose of Daisy Mountain Rock & Mineral Club is to promote and further an interest in geology, mineralogy, and lapidary arts, through education, field experiences, public service, and friendship.

VOLUME 6, ISSUE 11

DECEMBER 2021



Merry Christmas

Happy Holidays

Happy New Year



dumortierite

By Susan Celestian

Chemical Formula - (Al,Fe³⁺)₇(SiO₄)₃(BO₃)O₃ Crystal System - Orthorhombic (3 axes of unequal length, 90° from each other).

Growth Forms/Habits - Fibrous/acicular, massive **Hardness -** 7-8

Luster - Vitreous

Streak - White

Color - Blue, light blue, blue green, violet-blue, pink, red
Diaphaneity - Transparent to translucent
Specific Gravity - 3.21-3.41

Cleavage - Distinct in one direction; poor in another Fractures - Fibrous

Occurrence - Pegmatites, metamorphic rocks
Other - twinning common

- is pleochroic¹: deep blue or violet TO yellow, red-violet, colorless TO colorless, very pale blue
 - fluorescent: LW yellowish white; SW bluish white (activators TiO₆ or Cr⁺³)

Uses - production of high-grade porcelain

Dumortierite was first described in the Rhône-Alps of France, and oddly is named for a paleontologist -- Eugène Dumortier. As mentioned above, dumortierite is most often associated with high temperature regional metamorphic aluminum-rich rocks; often in association with kyanite, andalusite, sillimanite, and staurolite.

Reports of limited occurrences of dumortierite have been reported in Cochise, La Paz and Santa Cruz Counties in Arizona; however, it is not reported to occur in any great abundance. There are a couple localities in California, not too far from us. One is near Amboy, Ca; the other is not far from a kyanite locality (that is slated to be included on a future club field trip) in the Cargo Muchacho Mts., in California and near Yuma. (See Gem Trails of Southern California).

See Figures 1-6 for images of dumortierite.



FIGURE 1 BROWN DUMORTIERITE

This specimen is not the color typically in mind, when one thinks about dumortierite.
Locality: Champion Spark Plug Co.
Mine, Pershing Co. NV Photo by Julie Hoskin, Smithsonian Museum and licensed by CCI (Public Domain)



FIGURE 2 BROWN DUMORTIERITE These delicate fibrous spheres of dumortierite in quartz are from the Goto Mine in Nagasaki Prefecture, Fukue Island, Japan. Photo by dnh_macro (Flickr) and licensed CC BY-NC-SA 2.0

Native Copper continued on page 16....

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¹ Pleochroism is a color change when a mineral is viewed from different angles.

DECEMBER SPEAKER - George & Sharon Lane



George and Sharon Lane are Arizonans, who have discovered an outcrop of very unusual rock, that the Lanes are calling stromatolites -- black and white fossil, they have dubbed Spider Web Stromatolite. Retirement gave them opportunities to prospect for rockhounding treasure, and it paid off. You can visit their website - Rocking-Oldies.com -- and I see



that 49er Minerals is selling cabs made of their material on Etsy.

Stromatolite
Ancient and our friend

George presented a summary of the characterization of stromatolites:

- ★ They are formed by layer upon layer of sticky cyanobacteria laminae, that trap silts and clays. What is preserved are those layers.
 - ★ Stromatolites have served as an important food source in the ancient oceans.
 - ★ Their respiration was largely responsible for the oxygen in Earth's atmosphere.
- ★ The oxygenated water column, alternating with oxygen-free periods, resulted in the formation of the Banded Iron Formations (BIFs), such as we have collected at Mingus Mountain, and the site near Anthem.
 - ★ Some modern sites in which stromatolites persist are: Sharks Bay (Western Australia), freshwater lakes in British Columbia, hot springs in Yellowstone, Antarctica, and elsewhere -- essentially in extreme environments not likely to support or attract creatures that would eat the

cyanobacteria.

★ There are several primary growth habits: conical, banded or planar, domes, and columnar. And then there is the unusual habit of the fossil beds the Lanes have found.



Horseshoe Lake, Maricopa Co., AZ



Logan Pass, Glacier National Park



Logan Pass, Glacier National Park





Shark Bay, Western Australia

A good way to browse for more images is to search for stromatolites on <u>creativecommons.org</u>. And for more information, refer to the December 2019 *Rockchips* on the DMRMC <u>website</u>.

Zoom Board Meeting Minutes December 6, 2021

- In Attendance: Bill F., Bob S., Claudia M., Cynthia B., Ed W., Howard R., Rebecca S., Sue C., and Tiffany P.
- Partial minutes are missing I was late to the meeting
- Information covered in the general meeting minutes
- Ed W. discussed the 2022 show
 - An onsite vendor chair is needed
 - ♦ Marketing chair is Jessica R.
 - ♦ Vendors are needed
 - If anyone has suggestions, please email Ed W. dmrmclub@gmail.com
 - Table plan will need to be updated
- The upcoming general meetings was discussed
 - ♦ Sharon and George Lane for December
 - January speaker was changed to February
 - A speaker is needed for January
 - Swap meet suggested as alternative
 - ⇒ This would be a meeting where we all bring mineral related items to swap with one another
 - ⇒ One is typically done each year so this would be a good option especially right after Christmas
- Thank you to the volunteers who will bring refreshments to the meetings!
- The silent auctions items were discussed
 - The newsletter has information on items for auction
 - ♦ 3 items for December meeting
- Stan C. discussed the claim
 - Reclamation surety bond being processed

Respectfully submitted, Rebecca Slosarik, secretary

General Meeting Minutes December 7, 2021

- Open attendance- about 48 attendants
- Ed W. called the meeting to order
- Thank you, George and Sharon Lane, for the insightful presentation on stromatolites
 - And especially for bringing all the specimens to share with the club
 - Stromatolites can be found in AZ where mescal limestone is present, and elsewhere

- Welcome newcomers, we are always excited to see more members join!
 - If you need anything, the newsletter, emails, website, and Meetup have pertinent information in them
 - We also have board members at the meetings that can help with any issues
- Raffle was conducted by Robin S.
 - ♦ Made the club \$163
 - ♦ Silent auction made \$135
- Cynthia B. discussed the financials
 - Best month of the year because of dues and raffles
 - We now have a net income, instead of a deficit, for the year
 - The loss of the show and meetings due to Covid-19 halted those income streams for the last two years
 - ♦ The club is still in good standing regardless
- Stan C. talked about the claims committee
 - ♦ Nothing new to present
- Bill F. discussed the field trips
 - January will be busy, so watch out for emails
 - November trips went well
 - Check out newsletter to see items rockhounded
 - Blue Cube/Prism mine will be the last trip of the calendar year
- Ed W. announced office nominations
 - ♦ Ed will stay the president for another year
 - ♦ Deanne G. will take on treasurer role soon
 - Renee Isack was nominated as a board member
 - All nominations (and current positions held) were unanimously approved
 - The board is meeting through Zoom for the foreseeable future
- The name tags were delayed via USPS and did not make it to the meeting
 - ♦ They will be available for the next general meeting
 - Sorry for any inconvenience
- The Christmas party will be held Dec. 11th
 - ♦ White elephant exchange
 - ♦ At Dave Haneline Mine
- The upcoming show was discussed
 - ♦ Meeting on Dec. 15th at the civic building
 - ♦ The show will be held at the Anthem Elementary School
 - Watch emails with details on the next meeting

...Minutes continued from page 4.....

- Jennifer G. talked about the wire wrapping class
 - ♦ Anyone with any skill is welcome
 - ♦ Bring tools/supplies if you can
 - ♦ Donations/tips are always welcome
- Doug Duffy discussed the lapidary services
 - ♦ The club's equipment is housed at the North Mountain Visitor Center, 12950 N 7th St., Phoenix, AZ 85022
 - Lapidary and silversmithing classes are available
 - ♦ Shop access Mon, Thurs, or Saturdays
 - Must be certified to use shop
- The upcoming meeting does not currently have a speaker
 - If no speaker can be found in time, we will have a swap meet meeting
 - Email will be sent out with details when determined

Respectfully submitted, Rebecca Slosarik, secretary

Show Meeting Minutes December 15, 2021

- Open meeting, no attendance necessary 14 in attendance
- Ed W. called the meeting to order
 - ♦ We have had 7 previous successful shows
 - ♦ Last 2 years have been cancelled
 - ♦ We will be returning to original location
 - Anthem Elementary school
 - We will have the gym and a fenced in courtyard
 - The show is a great place to boast the rockhounding hobby to the public
- Marketing chairs Jessica R. and Jessie C.
 - Postnet will be contacted shortly for flyers and posters
 - Thank you, Stan C., for the photos
 - ♦ Ad will be in Rock and Gem magazine
 - ♦ Foothills Focus PSA
 - ♦ Barricade highway sign will be put up again
 - 2 STEM nights for January will help advertise the show
 - In & Out newsletter may have been dissolved -- Will not be used this year
- Kids Corner chairs Bill & Jeannie S.
 - ♦ Everything still ready from 2020
 - ♦ 60-65 specimen cartons for \$2
 - Need volunteers for show
- Will need volunteers to get material for the show from the club's trailer
 - Details to be discussed later
- Club's specimens chair Bob E.
 - ♦ Will need help selling items
 - ♦ Don R. will have a faceting demonstration

- Raffle tickets chair Rebecca S.
 - Will need more volunteers to sell raffle tickets
 - Will get specimens from vendors for raffle
- Admissions chair Jessie
 - Will get front door tickets
 - 3 people volunteered to help so far
- Membership chair Tiffany P.
 - ♦ Several helpers lined up
- Electrical setup chair Dave and Greg J.
 - Will go over to school and measure
 - ♦ Will get old plans from Howard R.
- Show setup chair Don R.
 - Will be 4pm until finished on Friday and 4pm until finished on Sunday
 - Need more volunteers for setup
 - ♦ May use Royal Rentals for tables
- Food vendor chair Nancy G.
 - Will try to get hot dog vendor again
 - Will also supply volunteers' pizza on Friday and coffee and donuts Saturday and Sunday mornings
- Security chair Steve
 - Overnight volunteers will be needed
 - Because of outside displays and paying local police is too expensive
- Vendors chair Jim R.
 - Opening the property of the
 - Thank you, Stacy N. for volunteering
 - ♦ Will have about 30-33 vendors
 - Have been contacted, but some are not available anymore
 - 6ft table = \$65, minimum of 3 tables per vendor
- Fluorescent tent chair was Dave H.
 - Will need a chair, and volunteers to setup and present
 - ♦ Mike M. will assist
 - ♦ The lights, display, and tent are all available
- Display case chairs Mike & Laurie M.
 - Members will bring materials from club trips to show off
 - Will have a vote for best case
- ATM
 - Will contact Jennifer's mom to make sure it can be made available again for the show
- Signs
 - Will need 4 people to help put signs around Anthem
 - Helps direct traffic to the show
- Next show meeting will be January 19th at 6pm at the Anthem Civic Building

Respectfully submitted, Rebecca Slosarik, secretary

3 HAPPY HIGH BIDDERS IN THE SILENT AUCTION



A sherry-colored topaz in rhyolite from Utah!





A whole flat of quartz crystals!

JANUARY'S OFFERINGS:

- Topaz (Utah)
- Chrysocolla & Malachite (Chilito Mine)
 - Vanadinite (Morocco)
- Barite (Dave Haneline Mine)



FIELD TRIP TO RED CLOUD & N. GERONIMO MINES

Friday, December 3, 2021

Photos & Text by Bill Freese

Another great trip to the world famous Red Cloud Mine for Wulfenite. This was another combined trip with DMRMC & MSA. We ended up with around 20 folks who decided to venture into our southwestern desert on the hunt for Wulfenite (the state mineral for Arizona). People stayed from 1 day to 4 days out at the mine. We also had the chance to go DOWN INTO the North Geronimo mine for Vanadinite. What an awesome adventure and a great workout. All found plenty of good stuff.







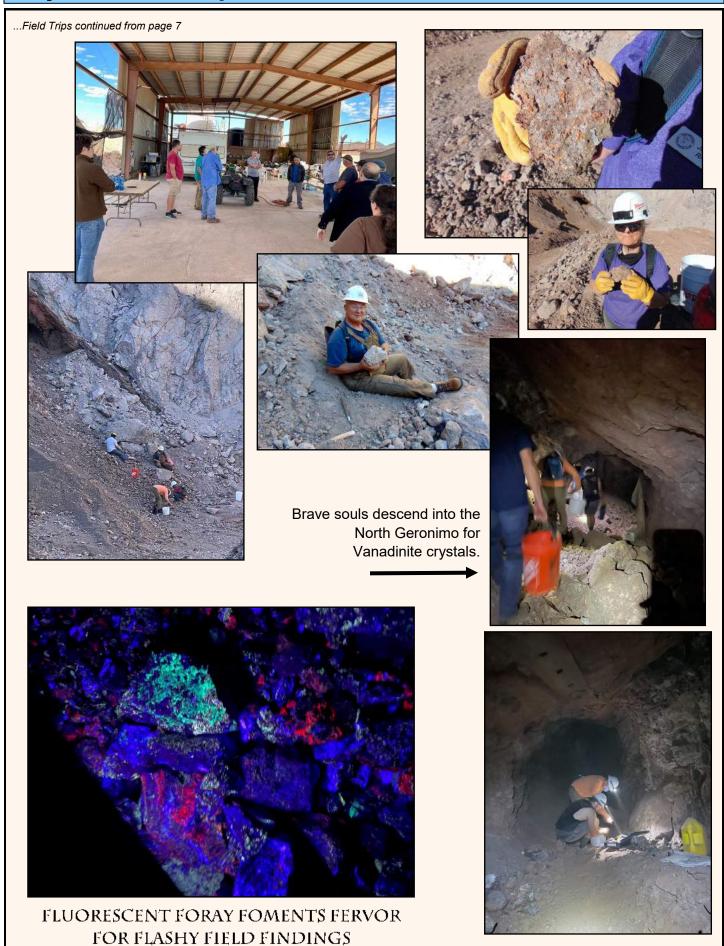








Field Trips continued on page 8..



Field Trips continued on page 9...

...Field Trips continued from page 8

FIELD TRIP TO CONTACT MINE

Friday, December 8, 2021

Photos by Bill Freese

Ten club members attended this trip. Two sites at the mine yielded some potentially beautiful amethyst specimen. Look for some polished pieces to post on the club website



...Field Trips continued from page 9













Field Trips continued on page 12...



...Field Trips continued from page 11





























GYPSUM LAMP

TRAVERTINE SKULL





Field Trips continued on page 13...

...Field Trips continued from page 12

FIELD TRIP TO SPECTRUM, PRISM & BLUE CUBE MINES

Saturday, December 18, 2021

Photos and text by Bill Freese

These are the pics from the last trip of the year to the Prism/Blue Cube/Spectrum claims. The weather was great, and we had about 20 folks attend the trip for mostly fluorite, but also amethyst, barite and other minerals/rocks. Everyone enjoyed their workout, as it was a lot of hard-rock mining to get the good stuff. There was plenty of stuff on the surface, but it was mostly bleached out by the sun. It still has great forms and still fluoresces. I handed the camera to JoHanna Raupe for a bunch of pics, while I helped dig in one of the pits. Another great trip. Merry Christmas and Happy New Year! The next trip is Jan 8th.





















Field Trips continued on page 14..

...Field Trips continued from page 13



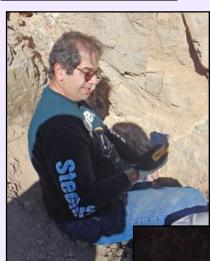
















..Dumortierite continued from page 2



FIGURE 3 DUMORTIERITE IN QUARTZ
This specimen shows inky dumortierite boldly
embraced by milky quartz from Brazil. Photo
by <u>James St John</u> and licensed under <u>CC BY</u>
2.0



FIGURE 4 DUMORTIERITE IN QUARTZ Look closely (even better, enlarge the view on your screen), and you will see clear to blue needles of dumortierite included in these quartz crystals. Locality: Vaca Morte, Brazil. Photo by Stan Celestian.



FIGURE 5 TUMBLED DUMORTIERITE With a hardness of 7-8, dumortierite is fairly sturdy, dense, and takes a good polish. *Photo used with permission of New Earth Gifts*.



FIGURE 6 DUMORTIERITE CABOCHON Sporting various shades of blue, this cabochon would make a foo specimen to wire wrap. Photo used with permission of <u>RubysHouseofCrystals</u> (Etsy).

GENERAL RESOURCES FOR DUMORTIERITE

http://webmineral.com/data/ Dumortierite.shtml#.Yba9L71Kg2w https://en.wikipedia.org/wiki/Dumortierite https://www.mindat.org/min-1329.html https://www.fluomin.org/uk/fiche.php?id=131 Mineralogy of Arizona by Anthony, Williams, Bideaux, Grant

GEO MINI

STYLOLITES

By Susan Celestian

A rock feature that we don't see much of in Arizona (I don't know why), is *stylolites* ("pillar stone"). They are serrated planes within a rock, and in cross section they look like the squiggly lines one sees in an EKG or a seismogram. They are most common in carbonate rocks, such as limestone dolostone, and marble (although they do occur in sandstone, some igneous rocks and ice).

Stylolites are the result of dissolution. Under pressure -- and in the presence of some water in a porous rock, grain to grain pressure causes minerals to dissolve and to leave behind insoluble materials, such as clay, silica, pyrite, oxides, and organic debris. The dissolved mineral solution will move away from the area of origin and either deposit elsewhere within the rock, or leave the rock all together.

There are several recognized geometries to which stylolites conform: wave-like, sutured, rectangular, peaked, and seismogram-type.

Most frequently, they parallel the bedding planes; however, they may occur at angles oblique to the bedding planes -- it all depends on the directions from which the pressures impact the rock.

See Figures A-D.



FIGURE A STYLOLITES in MARBLE These classic stylolites occur in the marble flooring in the Natural History Museum of Los Angeles County, Los Angeles, CA. Photo by Susan Celestian





FIGURE B STYLOLITES in LIMESTONE In "A" you see sharply pointed stylolites in the Dundee Ls near Junction, OH. In "B" are rectangular stylolites in the Genevieve Ls at Mammoth Cave, KY. Photo by <u>James St. John</u> and licensed under <u>CC BY 2.0</u>.



FIGURE C DISSOLUTION AT STYLOLITES The gap along these stylolites in the Fort Payne Fm., north of Burkesville, KY, illustrates the movement of minerals away from the stylolites. Photo by <u>James St.</u> <u>John</u> and licensed under <u>CC BY 2.0</u>.



FIGURE D STYLOLITE SURFACE

This image illustrates the planar nature of stylolites - they are not just a squiggly line in the rock; they

are a crenulated plane. Photo by <u>James St. John</u> and licensed under <u>CC BY 2.0</u>.

UPCOMING FIELD TRIPS

Here is a general list of upcoming trips, for the next 3 months. Details will be emailed to the general membership.

January

Sheeps Bridge - 8th Sat Aquarius Mtns - 12th Wed Globe Area Mines- TBD Sat Quartzsite Club Day - 22nd Sat Mushroom Rhyolite - 26th Wed

February

Tucson show - 5th Sat Morristown Mines - 9th Wed Burro Creek area -12th Sat Dave Haneline Mine (Wickenburg) - 19th Sat Blue Cube/Prism/Spectrum - 23rd Wed Peridot (San Carlos) - 26th Sat

March

Saddle Mtn (Tonopah) - 5th Sat Reserve Bank Mine? - 9th Wed Deming, NM (Weekend) - 11th-13th Fri-Sun+ Dave Haneline Mine (Wickenburg) - 23rd Wed Bullard mine - TBD

DATES SUBJECT TO CHANGE

Bill and the field trip committee will be actively looking for productive spots for field trips. If you have any suggestions, you are encouraged to contact him at bfreese77@cox.net

JANUARY SPEAKER

Evan Jones, local mineral dealer and premier collector of Arizona minerals, will be our January speaker.

The Milpillas Copper Mine, Sonora, Mexico

The Milpillas Mine is an underground copper mine in Sonora, Mexico operated by Industrias Peñoles. Opened in 2006 to exploit a recently discovered, deeply oxidized and enriched Porphyry Copper deposit. Finely crystallized specimens of azurite and malachite pseudomorphs after azurite began to appear on the collector market and shortly after, truly dazzling specimens of azurite, malachite, brochantite, and eventually some rare copper minerals began appearing in substantial numbers -- much to the delight of collectors worldwide. It is the most important crystallized azurite discovery in modern times.

Join Jennifer Gecho for



Before the meeting on the 1st Tuesday 4:30-6:15

Anthem Civic Center, 3701 W Anthem Way

FACEBOOK



Visit and join the club page periodically. See what is happening, and boost our visibility on the web. Go to: The Daisy Mountain Rock and Mineral Club. set up so you can post photos of outings or related items. Share with friends!

AWARD-WINNING WEBSITE

http://www.dmrmc.com/

If you have comments, contact Nancy Gallagher.



INSTAGRAM

Follow the club on Instagram. Go to https://www.instagram.com/ daisymountainrockclub/ and follow today. Share with friends!

Officers, Chairpersons, & Trustees

President: Ed Winbourne.....ewinbourne@gmail.com Vice President: Bill Freese..... bfreese77@cox.net Secretary: Rebecca Slosarik .. rslosarik1@gmail.com Treasurer:Deanne Gosse deanne.gosse@gmail.com Publicity: Jessie Redmond...

Membership: Tiffany Poetsch tnpoetsch@gmail.com

Editors: Susan & Stan Celestian....... azrocklady@gmail.com Field Trip: Bill Freese ... bfreese77@cox.net

Mine Steward: Stan Celestian..... stancelestian@gmail.com

Show Chair: Ed Winbourne

Trustees:

Cynthia V Claudia M Susan C Tiffany P Bob E Jim R Jennifer G Witt R Don R Howard R Jessica C Rebecca S Johnaton M Joe G Clark L Bob S. Renee I Nancy G

Meetings are held the 1st Tuesday of the month at the Anthem Civic Building, 3701 W Anthem Way, Anthem, AZ 85086. General meeting at 6:30 pm. We do not meet in July or August.

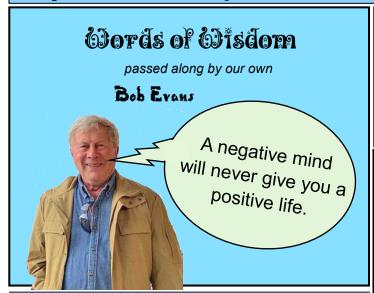
DMRMCLUB@GMAIL.COM

Membership Dues:

First year \$30, then \$20.00 Adults per Person First year \$45, then \$25.00 Family (2 people)

Meeting Dates for 2022

Jan 4, Feb 1, Mar 1, Apr 5, May 3, June 7, Sept 6, Oct 4, Nov 1, Dec 6



UPCOMING AZ MINERAL SHOWS

January 7-9 - Mesa, AZ Flagg Mineral Foundation; Mesa Community College, 1833 W Southern; Daily 9-5: Admission: Free. See Poster on <u>page 20</u>.

January 1-February 28 - Quartzsite, AZ There are several shows going on during this time: Desert Gardens, Tyson Wells, PowWow, Gold Show. Go HERE & THERE to see show schedules.

February 10-13 - Tucson, AZ Tucson Gem & Mineral Society; Tucson Convention Center, 260 S Church Av; Thur-Sat 10-6, Sun 10-4; Admission: Adults \$13, 2-day ticket \$22, children under 14 free with paying adult. See flyer on page 22 for \$3 off coupon.

Go <u>HERE</u> for a list of other shows going on in Tucson during January/February.

March 17-20 - Anthem, AZ Daisy Mt Rock & Mineral Club; Anthem Elementary School, 41020 N Freedom Way, Anthem, AZ 85086; details to follow.

June 17-19 - Las Vegas, NV Southern Nevada Gem & Mineral Society (in conjunction with Rocky Mt. Federation & Mineral Society Conference; Orleans Hotel & Casino; Fri-Sat 9-4, Sun 9-2; Admission: Adults \$5. See flyer on page 23.

If you are travelling, a good source of shows AND clubs is http://the-vug.com/educate-and-inform/mineral-shows/ OR http://www.rockngem.com/ShowDatesFiles/ShowDatesDisplayAll.php?
ShowState=AZ OR https://www.rockandmineralshows.com/Location/?displayShows=true

NEEDED: QUALITY MINERALS (or OTHER) DONATIONS WITH LABELS -- for monthly raffle prizes; and for raffle, door prizes, and sales tables at the annual show. If you have specimens to donate, please see Robin Shannon. The Daisy Mountain Rock and Mineral Club is a 501(c)(3) non-profit organization, and will gratefully acknowledge your donation with a Tax Deduction Letter. Thank You!

NOTE FROM THE EDITOR

Have a geological interest? Been somewhere interesting? Have pictures from a club trip? Collected some great material? Send us pictures -- or write a short story (pictures would be great).

Deadline for the newsletter is the 22nd of the month.

Mail or Email submissions to:
Susan Celestian
6415 N 183rd Av
Waddell, AZ 85355
azrocklady@gmail.com



Visit http://rmfms.org/ for news about conventions, events, and associated clubs. If you are travelling, you might want to contact a club local to your destination. Maybe they have a field trip you could join, while in town.

NORTH MT OPEN STUDIO - JANUARY

You are invited to NMVC Open Studio. <u>Lapidary & Silversmithing</u> on Thursdays and the first, third and fifth Saturdays in a month, from 8:30 to noon with cleanup starting at 11:45.

NMVC requires that everyone wear a mask while in the building. (Other NMVC requirements will be sent in a later email or on premises.)

Only four people can sign up, and must do so for the full three hours that the shop will be open each day. First come, first served. Usage fee is \$8/hour.

Notice: Please bring your own towels, polishing compounds and buffing wheels as they will no longer be provided.

Please arrive no later than 8:45 a.m. The center may close to the public at 10.

Email your request for the day(s) you are interested in participating ASAP. Email Shirley Cote at crystalc17@gmail.com

January – Thursday's dates are 13, 20, 27 January – Saturday's dates are 1?, 15, 29

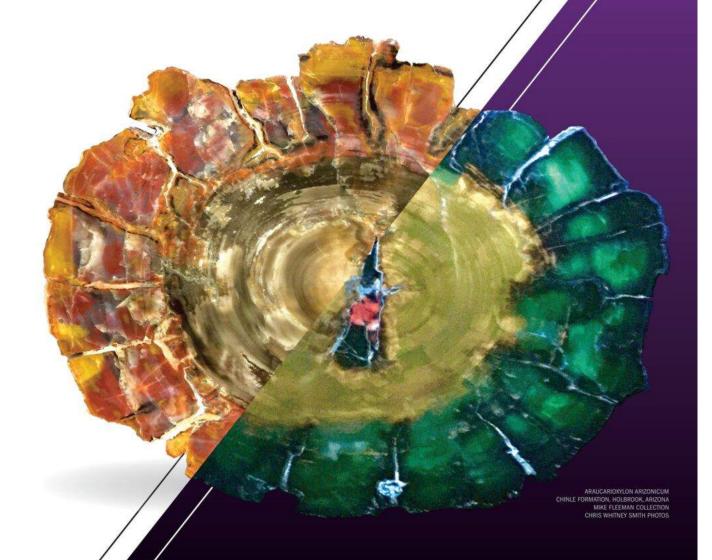
If more than four people wish to participate on the same day, please expect to be bumped or rotated to another day as efforts to accommodate everyone will be taken.

We would also like to inquire as to anyone wishing to come in for <u>Lapidary Only</u> Open Studio on Mondays - 9-12. Email Shirley at crystalc17@gmail.com <u>Usage fee is \$8/hour</u>.

January - Monday's dates are 3, 10, 17, 24, 31



FLAGG GEM and MINERAL SHOW



FLUORESCENT MINERALS

SPONSORED BY FLAGG
MINERAL
FOUNDATION

FREE SAMPLES FOR KIDS FREE ADMISSION & PARKING

JANUARY 7TH/8TH/9TH, 2022 MESA COMMUNITY COLLEGE | 9_{am} - 5_{pm} NE CORNER OF US 60 & DOBSON ROAD

THE TAILGATE SHOW TRADITION CONTINUES!

WWW.FLAGGSHOW.INFO

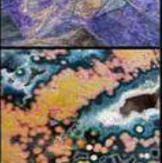


DESERT GARDENS ROCK GEM & MINERAL SHOW











DESERT GARDENS ANNUAL INTERNATIONAL ROCK, GEM AND MINERAL SHOW

January 1 – February 28 9:00 am – 5:00 pm (Seven Days Weekly)

1055 Kuehn Street Quartzsite, AZ 85346 The Tucson Gem and Mineral Society Proudly Presents:

Gem & Mineral Show®

THE APATITE SUPERGROUP

and the Fluorescent Mineral Pavilion with over 80 Spectacular Displays by

The Fluorescent Mineral Society

TUCSON CONVENTION CENTER

260 South Church Avenue - Tucson, Arizona 85701

Thursday, Friday & Saturday: 10:00 a.m. - 6:00 p.m. | Sunday: 10:00 a.m. - 4:00 p.m.

Tickets go on sale Thursday, January 16, 2022 at all TCC Ticket outlets or call the TCC Box Office at 520-791-4101, option 1 for more information.

Don't forget, you can buy your ticket at the door!

Admission is \$13.00, Children 14 and under FREE with a paying adult

Friday, February 11, 2022 is Military (active & retired) and Senior Citizens Day (62 and older), receive \$3.00 off the regularly priced ticket*

2-day tickets will be available for a cost of \$22.00*

Clip the coupon for \$3.00 OFF on one adult General Admission ticket*

ADDITIONAL FEATURES:

Retail Dealers | Exhibits Junior Education Area FREE Lectures | Symposiums "Micro- Mineral" Room Hourly Drawings at the Giveaway Booth Saturday Night Banquet & Awards

Silent/Live Auctions



"cannot be used with any other discount





TUCSON CONVENTION CENTER February 10 - 13, 2022

CHILDREN 14 AND UNDER FREE WITH A PAYING ABUET



cannot be used with any other discount.

VIVA LAS VEGAS ROCKS

June 17 - 19, 2022 at the Orleans Hotel



Rocks, Gems & Jewelry Show

Presented By

Southern Nevada Gem & Mineral Society



Hosting The Rocky Mountain Federation & Mineralogical Society Conference

Daily

Admission 5.00 Children Under 12 Free ickets Entered in Drawing

Exhibition Hours:

Friday 9am to 4pm Saturday 9am to 4pm Sunday 9am to 2pm

50 + Vendors Displays Speakers Raffles Kids Activities Door Prizes

Orleans Hotel & Casi Reservations

800 675-3267

ID: ASN2C06





Africki Comacts

sngmspresident@gmail.com sngmsshowchair@gmail.com www.snvgms.org

