



Daisy Mountain Rockchips

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 3, ISSUE 8

SEPTEMBER 2018

Sedimentary Structures: Graded Bedding

By Susan Celestian

In the normal bedding in coarse clastic sedimentary rocks, such as sandstone, conglomerate, and breccia, the fragments are either pretty uniform in size or are randomly arranged within the beds. In **graded bedding**, the clasts are very specifically arranged. Almost always, the particles are coarsest on the bottom and grades up through finer and finer particles. See Figures 1-2. There is a variation, called **reverse graded bedding**, in which the particles are coarsest at the top, and finer at the bottom (described on page 4).

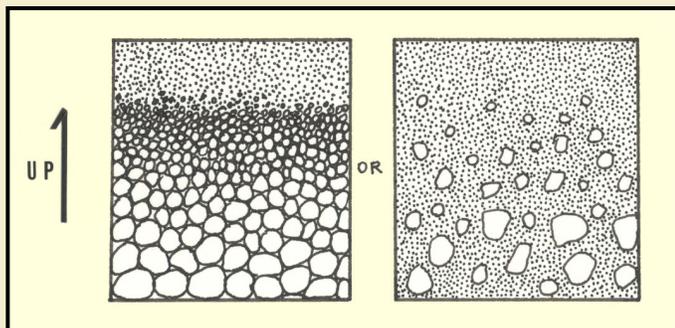


FIGURE 1 Graded Bedding In graded bedding, the usual situation is that the coarsest particles are at the bottom of the layer, and they become finer as one moves toward the top. As a result, graded bedding can be used to determine the original UP direction.

Illustration by Susan Celestian

As illustrated in Figures 1 and 2, graded bedding can be used to determine the original UP direction. Figure 3 is a drawing based on a real-life situation in Tennessee. Here, a sequence of graded beds has been tilted and overturned. That structural history is indicated by the orientation of the graded bedding.



FIGURE 2 Graded Bedding This is a cobble the author found in some glacial till, is part of a rock unit that involved sedimentary layers that had graded bedding. *Photo by Stan Celestian*

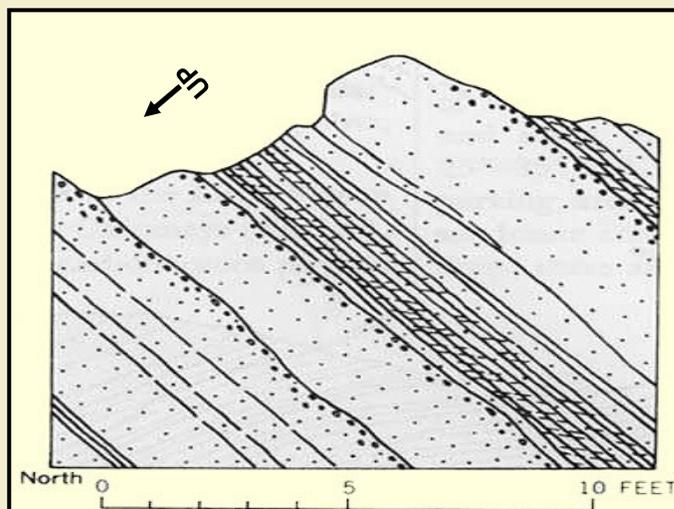


FIGURE 3 Overturned Graded Beds This is a diagram of a series of graded beds at The Sinks on Tennessee Highway 73 at Blount-Sevier County line. The sequence has been overturned, and original UP was determined, as illustrated by the arrow. *Illustration courtesy of the USGS, from USGS Bulletin 587*

Graded Bedding continued on page 4.....

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Board of Trustees Meeting Minutes — September 4, 2018

The meeting was called to order by President Winbourne at 5:00 p.m. Those in attendance were: Ed Winbourne, Sue and Stan Celestian, Tammy Early, Tiffany Poetch, Bob Salter, Claudia Merek, Clark Little, Victoria Peterson, Howard Roose (via telephone).

MINUTES: Motion made by Tiffany, seconded by Tammy, and unanimously carried to approve June meeting minutes with the correction “Cynthia presented the financial report.”

Financial Report: Due to absence of Treasurer, there was no financial report.

Old Business:

Storage Container: Ed reported we are completely out of the U Haul storage unit. The expense of the trailer was \$2200 which included moving. Rental of the land will be \$60 per month, with \$300 rental paid in advance.

Stan suggested the trailer be placed on blocks to preclude tires rotting.

North Mountain Visitors Center: Ed reported the agreement between the Center and our Club has been signed. Our Club will receive all monies from use of the saw. The Center would like a Club member be present at the Center one day per week. Howard, Ed and Claudia have attended the lapidary class and they will be available to monitor the program. There will be a \$5 per hour charge for use of the saw. Anyone using the saw must have attended Doug’s class. The Club has spent \$80 for oil for the saw. All money received from the Center will be set aside for saw maintenance. Claudia will take pictures of the saw for informational purposes.

Old Business:

Desert Botanical Garden – Strange Garden: Ed reported we have been approached by the Desert Botanical Garden to participate in the October 26 – 27 “Strange Garden Event.” This is a Halloween type event for children. They required set up before 5 PM and take down at 10 PM each evening. The Board felt it would be difficult for our members to assemble and disassemble the displays as well as a fluorescent tent due to timing of the set up and take down and distance.

Board Minutes continued on page 3.....

General Membership Meeting Minutes -- June 5, 2018

The meeting was called to order by President Ed Winbourne at 6:30 PM.

Ed introduced the evening’s speaker Jay Yett. Jay is a retired geology professor at Orange Coast College, Costa Mesa, California; and is a founding member of our Club. Jay spoke about fossils (micro-fossils), particularly in the oceans, and also what fossils are used to determine the geological history of the Earth. He also talked about physical/chemical changes in oceans, continents and climates. Sedimentary rocks in oil wells are used to collect samples of microfossils. He specifically talked about foraminifera which are single cell animals in the ocean. Jay showed slides and answered questions.

After the break, a raffle was held of donated items.

Ed discussed the financial condition of the club and mentioned the purchase of the storage trailer positioned in New River and that all items have been removed from U-Haul storage and placed in the trailer. The trailer costs were \$2200, including transportation, and land rental is \$60 per month. This will be a great savings over monthly rental at U- Haul.

Ed gave a big thanks to Bob Evans for all his work on the trailer and to all who assisted in the transporting of material from U-Haul to the new trailer storage.

Up-coming Field trips were discussed and are listed in the accompanying Board Meeting Minutes.

There were 45 people in attendance at the meeting.

Respectfully submitted by,

Victoria Peterson, Secretary and
Bob Salter, Scribe

2019

DUES DUE SOON

**Cynthia will start accepting
dues in October.**

...Board Minutes continued from page 2

Consensus of the Board was that we not participate this year.

Anthem Days: Ed brought up whether the Club should participate in Anthem Days stating there would be no sales at the event but it would be good advertising for the Club. After discussion, Ed will contact the promoters of Anthem Days for information; however, the Club will not participate this year.

Newsletter: Ed stated Sue is doing a fantastic job on the newsletter and all present agreed. Big thank you to Sue!!

2019 Gem & Mineral Show: Howard reported he is finalizing the Show Poster and will send out the three top photos for the Board to decide which should be on the poster. There was discussion on whether to raise the entrance and vendor fees for the 2019 show.

Motion: made by Ed, seconded by Bob, and unanimously carried to raise the entrance fee for adults to \$4 and all other entrance and vendor fees will remain the same as 2018.

Field Trips: Stan reported on the following field trips scheduled: Sycamore Creek – September 29; Amethyst Hill – October 27; Yellow Pine – November 16 (Dave Haneline); November Coalition trip to Lake Pleasant for Calcite; Burrow Creek – December; Night fluorescent rip to Black Pearl Mine south of Wickenburg (Ed Winbourne.)

Board Resignation: Joe Gecho has tendered his resignation from the Board effective immediately due to his attending school in Prescott. We will all miss Joe's input and enthusiasm for the Club. Discussion is tables until October meeting on whether to fill his position.

BUSINESS TO BE CARRIED FORWARD:

Storage container blocks installation
Treasurer's September financial report
North Mountain Visitors Center program update
2019 Gem & Mineral Show update
Open position on Board

There being no further business and upon unanimous approval, the meeting was adjourned at 6:00 p.m.

Respectfully submitted,
Victoria Peterson, Secretary



Image used with permission of the Royal Ontario Museum. Copying, further distributing or transmitting this image is expressly prohibited.

This is a photo of a fossil of *Hallucigenia sparsa*, from the Middle Cambrian Burgess Shale in the Walcott Quarry within Yoho National Park of British Columbia. Charles Walcott, who uncovered it, originally classified it as a polychaete worm, and reconstructed to be walking on the tall, stilt-like spikes. Alternatively, it was considered to be part of a larger worm-with-legs. In 1991, a similar fossil was collected in China. Upon preparation, it was discovered that more appendages were preserved folded under and at an angle into the rock beneath the fossil. After revealing them, it was found that there are 7-8 pairs of legs, with terminal claws.

So, *Hallucigenia* is a tubular Velvet Worm (onychophoran), about 3/16-1 5/8 inches long. It walks on the tall clawed legs, with matching pairs of spines projecting up from its back. Its head supports two eyes and a mouth with teeth. To see it in action go to <https://www.youtube.com/watch?v=w0ic80wtllE>

AND for some more information on the Burgess Shale, see the article on page 6.

WIRE-WRAPPING CLASS

4:30-6:30 pm

**Prior to the meeting on
Tuesday, October 2, 2018**

- Bring: cab or stone, about quarter-sized or larger; 20 gauge or higher round dead soft wire; Round nose pliers and wire cutter.

Free, but donations are appreciated. Questions?
Contact Jennifer at Jennifer@eliteshuttersandblinds.com

...Graded Bedding continued from page 1

Graded beds generally occur in sets, indicative of multiple or periodic depositional events. And the thickness of the individual graded beds ranges from millimeters to many meters.

Environmental significance of graded bedding:

Graded bedding is usually reflective of a relatively dense transporting medium, and one that is relatively slow-moving. The less dense the transporting medium, the more likely the settling time of different-sized particles is the same. Large and small particles settle out together, and the particle size is random throughout the bed (or layer). In a very dense medium, the coarsest (and heaviest) particles will settle out faster than the smallest. And, in fact, the smallest particles tend to be clay, which is lightweight and platy, so is kept in suspension by weak currents, and far longer than the larger particles. As a result, the transported particles are sorted vertically, within the bed (or layer). Graded bedding is most typical of fluvial seasonal and flood deposits (Figure 4), debris flows (Figure 5), and turbidity current deposits (described further on page 5).



FIGURE 4 Graded Beds Formed in a Fluvial Environment These graded beds formed in a slot canyon, near Alamo Lake. During periods of high discharge (flood), gravel and sand are deposited; and during subsequent periods of low discharge, clay and silt are deposited. *Photo by Craig Jones*

In the case of debris flows, avalanching dry sediments along slopes (such as dune slip faces or sloping blankets of air-fall particles), or special circumstances of differential settling, the style of graded bedding, may be **reverse graded bedding**. See Figures 5-6.

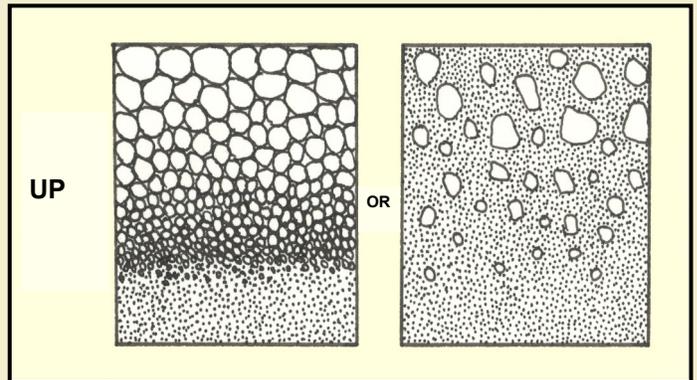


FIGURE 5 Reverse Grading Bedding In specific circumstances, graded bedding may exhibit as fine to coarse, from the bottom toward the top of a bed.
Illustration by Susan Celestian

For an example of the latter, there is a pumice deposit in a lake, within Death Valley. A volcanic eruption resulted in the air-fall deposition of pumice, which initially floated at the surface. Over time, the pumice became fully saturated with water, and sank to the lake's bottom. Naturally, the smaller particles became saturated first, followed by larger and larger particles. The result? A deposit with the smaller particles on the bottom, grading up into the coarsest particles at the top. <http://www.pitt.edu/~cejones/Geolimages/5SedimentaryRocks/SedStructures/GradedBedding.html>

Debris flows are very dense, viscous, wet mixtures of fine to very coarse particles. This situation allows very large boulders to "float" at the upper surface of the flow. When the flow slows or stops, much of the fine material, between the boulders, may flow out (wholly or partially). This leaves a layer of rock in which the particles are finer at the bottom, and coarser toward the top. See Figure 6.

....Graded Bedding continued from page 4

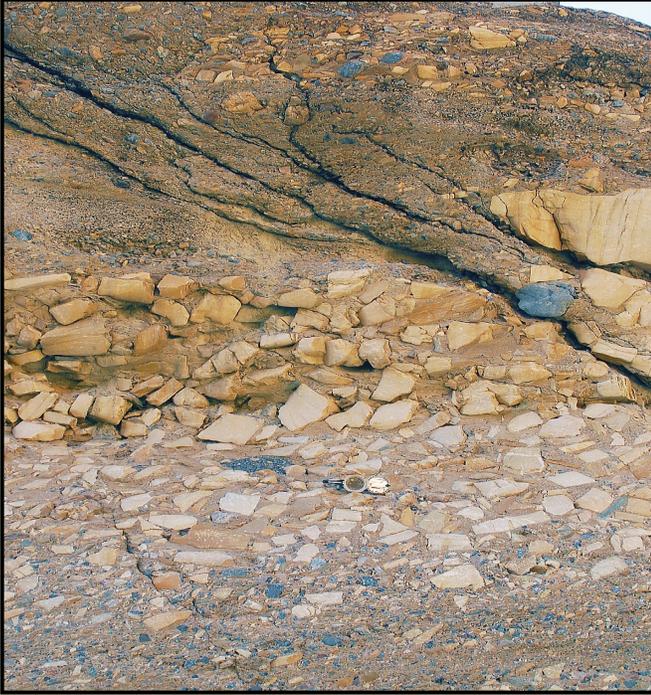


FIGURE 6 Probable Reverse Graded Bedding in Mosaic Canyon, Death Valley National Park

The Mosaic Canyon Breccia bedding is graded, and most likely is reverse graded bedding, as the thick slurries of repeated debris flows, through the slot canyon, allowed the larger particles to float cork-like at the tops of the flows. *Photo by Stan Celestian*

FIGURE 8 Turbidite with Graded Bedding

This meta-graywacke, from Great Falls Park, Virginia, exhibits the graded bedding of a turbidity current. Rocks and sediments



formed by turbidity current, are called turbidites.

Photo courtesy of the USGS <https://pubs.usgs.gov/circ/2004/1264/html/trip5/fig11.html>

Turbidity currents are very dense, turbid underwater debris flows. (Turbidity is when water is clouded by lots of sediment suspended in the water column.) They commonly occur:

- * when sediment buildup causes slumping and rapid flow from the continental slope onto the abyssal plain, or into a submarine trench, as where a river enters the ocean, and dumps a load of sediment on the continental shelf, at the edge of the continental slope (Figures 7-8);
- * where sediment-laden river water has a density greater than the seawater into which it is flowing, and feeds a rapidly moving plume, flowing down the continental slope. This is most usual after exceptional events, such as a strong storm, flood, dam break, or lahar - - all of which introduce large volumes of sediment into a fluvial system;
- * where coastal sediments are funneled into a submarine canyon (called canyon flushing) -- not dissimilar to the aforementioned process (Figures 7-8);
- * where an influx of sediment creates underwater slope instability in a large lake or reservoir;
- * where fluvial debris flows move large quantities (and very large particles) rapidly down a mountain valley (may result in reverse graded bedding).

Triggers for the currents can be an earthquake, overloading of a slope, and storms.

....Graded Bedding continued from page 5

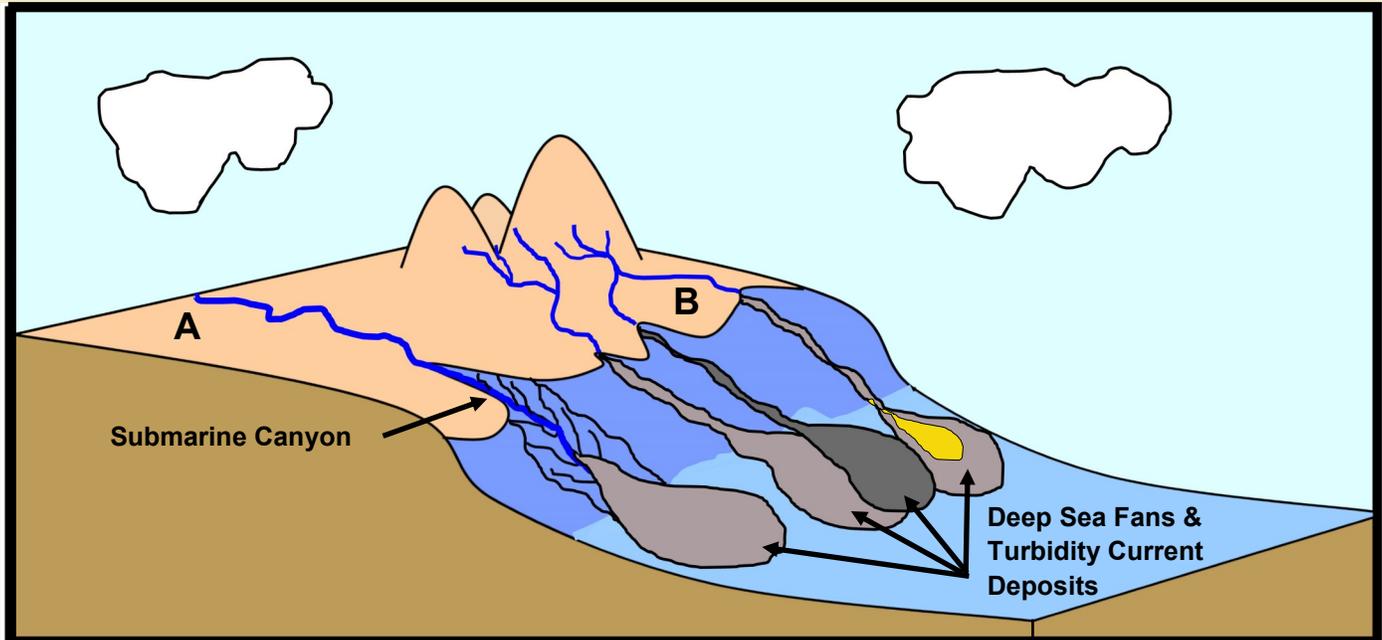


FIGURE 7 Turbidity Current Deposits Along a Continental Shelf-Slope-Abyssal Plain Environment In this diagram, two scenarios are presented that may result in turbidity current deposits in the deep ocean off a continental shelf/slope. In (A) there is a submarine canyon extending out from the mouth of a stream, down the continental slope. Sediment may enter this canyon from the stream, and/or via introduction from a sediment-laden longshore current. In (B) sediment that has piled up on the upper edge of the continental slope becomes unstable, and cascades down into the deep ocean. *Illustration (primitive as it is) by Susan Celestian*

BURGESS SHALE

By Susan Celestian

Before too long, I will undoubtedly be writing about fossil groups, since that is really my first love. Somehow I happened upon the website of the Royal Ontario Museum, and was inspired to write this filler -- a peek at what sorts of creatures may have inhabited simultaneously with the "Cambrian explosion", of complex, shelled animals -- an event to which Jay Yett referred in his recent club talk.

The 1957 discovery of the Precambrian Ediacaran Fauna in The Ediacaran Hills of Australia, and subsequent discovery of similar faunas on every continent, gave us a glimpse of creatures far more complex than the algae and bacteria, once thought to be the exclusive Precambrian fossils. Perhaps more on this in a later article.

However, in short order, those early shelled creatures of the Early Cambrian exploded into a quite diverse array of animals. How was that possible?

.In 1909, Charles Walcott (secretary of the Smithsonian and former director of the USGS) discovered a remarkable and uniquely preserved Middle Cambrian (508 mya) fossil deposit on Mt. Stephens, now part of Yoho National Park, in British Columbia, Canada. The fossils were soft-bodied,

diverse, complex, and often truly bizarre. Among them are the oldest known species in many extant animal groups; while others disappeared, as evolutionary experiments that did not succeed.

The preservation is so exquisite that despite the fact that the fossils are apparently flat carbonized films, they have been 'dissected' to reveal internal organs and eggs -- information almost always missing in the fossil record.

A few resources for a closer look at these remarkable fossils are:

- ◆ *Wonderful Life* (book) by Stephen J Gould: very easy-to-read look at the secrets of the Burgess Shale.
- ◆ <https://burgess-shale.rom.on.ca/en/sea-odyssey/>: A virtual tour of the Middle Cambrian Burgess seafloor. There are 7 short videos, and if you click on "View Transcript", you will see a description of each scene in the videos.
- ◆ <https://www.burgess-shale.bc.ca/> A guided hike to the World Heritage Site.
- ◆ <https://www.youtube.com/watch?v=w0ic80wtllE> YouTube video of *Hallucigenia sparsa*, as it is imagined to walk about
- ◆ <https://burgess-shale.rom.on.ca/en/history/discoveries/04-gsc.php>

UPCOMING FIELD TRIPS

WHEN: September 29, 2018

WHERE: Sycamore Creek

WHAT: Jasper (bright red)

MEET: There may be a meeting point scheduled in Anthem. But definitely meet near the collecting site at 9:30, depart at 10 am. Take 87 north toward Payson, .75 mi past MP222, turn left at sign for Sycamore Canyon, go 1.2 miles to parking area where we will group before heading in. The road to the site should be suitable for any vehicle. *Maps and directions will be sent in separate email.*

LEADER: Stan Celestian

WHEN: October 20, 2018

WHERE: Amethyst Hill area

WHAT: Barite, Fluorite, Amethyst, Cerussite

MEET: TBA

OTHER: Any vehicle OK to the turn off Constellation Road; high clearance the short distance to mine (ride-share at that point possible)

LEADER: Stan Celestian

WHEN: COALITION TRIP - October 27, 2018

WHERE: Wikieup Area (another Sycamore Creek)

WHAT: Lizard Stone (silicified green, banded siltstone)

MEET: 10:00; Cholla Ranch Rd (between MP 127 and 128, on Hwy 93, 70 miles north of Wickenburg)

OTHER: 4x4 to get to site, but will carpool from meeting area; be prepared to dig

WHEN: November 16-18, 2018

WHERE: Yellow Pine Mine (near Las Vegas)

WHAT: Galena, Kaolinite ps Orthoclase, Hydrozincite; Smithsonite, nearby Travertine
<https://www.mindat.org/loc-3891.html>

MEET: Meet site probably gas station at Jean/ Goodsprings exit on I-10W, at 8:30 am. You will need to make you own lodging arrangements. Dave and Robin will be staying at the Silverton (3333 Blue Diamond Blvd, Las Vegas)

OTHER: This is an overnight trip. MAKE RESERVATIONS EARLY. You will need to make you own lodging arrangements. Dave and Robin will be staying at the Silverton (3333 Blue Diamond Blvd, Las Vegas). Group dinner at the Silverton on the 17th. MORE DETAILS AS DATE NEARS.

LEADER: Dave Haneline

NEEDED: QUALITY MINERAL (or OTHER) DONATIONS WITH LABELS -- for monthly raffle prizes, and for raffle and door prizes for 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 EDITORS

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). We encourage topic suggestions also.

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

WHEN: COALITION TRIP - November 10, 2018

WHERE: Lake Pleasant area

WHAT: Calcite

MEET: TBA -- Probably suitable for any vehicle

LEADER: DMRMC TBA

WHEN: December 15, 2018

WHERE: Burro Creek

WHAT: Jasper, Agate

MEET: TBA

LEADER: TBA

WHEN: January 12, 2019

WHERE: Planet Mine

WHAT: Specular Hematite, Chrysocolla

MEET: TBA

LEADER: TBA

....Field Trips continued from page 6

WHEN: January TBA, 2019

WHERE: Black Pearl Mine

WHAT: Fluorescent Minerals

MEET: TBA

LEADER: TBA

OTHER: This will be an evening/after dark trip. Prior to dark, there will be a potluck. Sounds like fun!

WHEN: February 9, 2019

WHERE: Dragon Mine

WHAT: Tourmaline, Purple Mica, Thundereggs

MEET: TBA

LEADER: TBA

WHEN: March 19, 2019

WHERE: Peridot Mesa

WHAT: Olivine var peridot

MEET: TBA

LEADER: TBA

WHEN: April 6, 2019

WHERE: Bullard Mine

WHAT: Chrysocolla, Malachite

MEET: TBA

LEADER: TBA

WHEN: May 11, 2019

WHERE: Payson area

WHAT: Zebra Chert, Pennsylvanian Fossils

MEET: TBA

LEADER: Ed Winbourne

WHEN: June 1, 2019

WHERE: Lynx Creek near Prescott

WHAT: Gold

MEET: TBA

LEADER: Stan Celestian

DATES SUBJECT TO CHANGE

Stan 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 stancelestian@gmail.com

LAPIDARY & RELATED RESOURCES:

There are lots of websites out there with hints, tips, tutorials, and ideas about lapidary processes, silversmithing, wire-wrapping and other related crafts.

FACEBOOK: There are many groups on Facebook, there to join and reap the benefits of others' expertise. For example:

Lapidary Tips and Tricks: <https://www.facebook.com/groups/774419732663040/about/>

Silversmithing and Jewelry: <https://www.facebook.com/groups/Silversmithing.Jewellery/>

PINTEREST: Pinterest is a bottomless searchable font of ideas, on any imaginable subject. Members save ideas, tutorials, and images within many, many categories. Join and you can create your own categorized bank of information -- either by choosing ones already "pinned" by other members, or ones you find while browsing the web. Pinterest will suggest links related to your interests. For example:

Cutting Ethiopian Opal: <https://www.pinterest.com/pin/AWslrOwQVQXgl71ZBUljVmLJCg7W0OywLg2bhZcxyycQ34xwg0eNswM/>

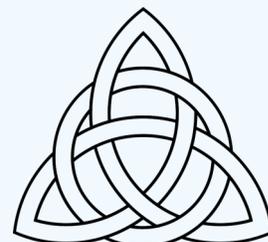
Wire Wrapping <https://www.pinterest.com/pin/452471093807120520/>

Viking Weave: <https://www.pinterest.com/pin/421438477603181989/>

YOUTUBE: Here you can find videos of instruction on many, many subjects. Sometimes it is very helpful to see a technique being done, and orally described.

For example:

Soldering a silver ring: <https://www.youtube.com/watch?v=AiTXgm5G23s>



UPCOMING AZ MINERAL SHOWS

October 12-14 - Buckeye, AZ West Valley Rock and Mineral Club (HelzaRockin' Gem and Mineral Show); Buckeye Arena, 802 N 1st St (Miller Rd); Fri-Sat 9-5, Sun 9-2; Admission: Adults \$3, children under 13 free, with adult.

October 13-14 - Sierra Vista, AZ Huachuca Mineral and Gem Club; Cochise College, 901 N Colombo Av; Sat 9-5, Sun 10-4; Admission: Free. **SEE POSTER ON PAGE 10**

October 20-21 - Sedona, AZ Sedona Gem and Mineral Club; Sedona Red Rock High School, 995 Upper Red Rock Loop Rd; Sat 10-5, Sun 10-4; Admission: Adults \$3, children free.

November 2-4 - Black Canyon City, AZ High Desert Helpers; High Desert Park, 19001 E. Jacie Ln.; Fri-Sun 9-4; Admission: Free.

November 17-18 - Payson, AZ Payson Rimstones Rock Club; Payson H.S., Longhorn Gym, W. Longhorn Rd & N. McLane Rd.; Sat 9-5, Sun 10-4; Admission: Adults \$2, children under 12 free.

November 24-25 - Wickenburg, AZ Wickenburg Gem and Mineral Club; Wrangler Event Center, 251 S. Tegner St.; Sat 9-5, Sun 10-4; Admission: free.



If you are travelling, a good source of shows AND clubs is <http://www.the-vug.com/vug/vugshows.html> or <http://www.rockngem.com>ShowDatesFiles/ShowDatesDisplayAll.php? ShowState=AZ> For out-of-the-country shows: <http://www.mindat.org/shows.php?current=1>

A good source for a list of Arizona Mineral Clubs and contact information is http://whitemountain-azrockclub.org/Public_AZ_Clubs_Links.html



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.

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](#). It is set up so you can post photos of outings or related items.

WEBSITE

<http://www.dmrmc.com/>

Here you will find photos highlighting field trips, activities/classes and our show, links to rockhounding regulations, newsletter archive, geologic articles, and links to geologic resources.

If you have comments, contact webmaster, Nancy Gallagher.

Officers, Chairpersons, & Trustees

- President:** Ed Winbourne.....ewinbourne@gmail.com
- Vice President:** Stan Celestian
- Secretary:** Victoria Petersong.victoriapeterson@yahoo.com
- Treasurer:** Cynthia Buckner
- Publicity:** Howard Roose
- Membership:** Tiffany Poetsch tnpoetsch@gmail.com
- Editors:** Susan & Stan Celestian.....azrocklady@gmail.com
- Field Trip:** Stan Celestian... stancelastian@gmail.com
- Show Chair:** Ed Winbourne

- Trustees:**
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 - Susan C
 - Tammy E
 - Bob E
 - Jennifer G
 - Joe G
 - Clark L
 - Claudia M
 - Tiffany P
 - Jim R
 - Witt R
 - Howard R
 - Bob S

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

DMRMCLUB@GMAIL.COM

Membership Dues: \$20.00 Adults per Person
 \$25.00 Family (2 people)
 \$ 5.00 Additional children

Meeting Dates for 2018

Jan 2, Feb 6, Mar 6, Apr 3, May 1, June 5, Sept 4, Oct 2, Nov 6, Dec 4



44TH ANNUAL HUACHUCA GEM, MINERAL & JEWELRY SHOW

OCTOBER 13th & 14th, 2018

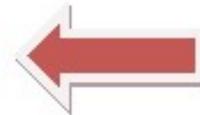
SAT., 9:00 AM - 5:00 PM

SUN., 10:00 AM - 4:00 PM

COCHISE COLLEGE

901 N. COLOMBO AVE.

SIERRA VISTA, AZ



FREE ADMISSION - FREE PARKING - HANDICAPPED ACCESSIBLE

Vendors Inside and Outside*Educational Displays*Jewelry*Jewelry Making Supplies*Raffles*
Kid's Games*Fluorescent Displays*Geode Sales/Cutting*Free Gem Stone Identification by Certified
Gemologist*

Vendor Info – Contact Ingrid Baillie - 520 459-3718, ibaille@cox.net

General Info – Contact Maudie Bailey 520 378-6291/520 249-1541, gmbailey@msn.com

