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 10

CLUB SIGNS PETITION OF SUPPORT FOR CHANGES TO BLM COLLECTING RULES

Hobby collecting (rocks, minerals, pet wood, common invert fossils) may be allowed for the first time in over 20 years (since 1996), in Southern Utah National Monuments, but BLM needs to hear from you by Nov 30. DMRMC Board has added the club’s endorsement to a letter drafted by the Southern California Paleontological Society, support of these proposed changes. https://goo.gl/Vjz3p4 Southern California Paleontological Society

INSIDE THIS ISSUE

Fulgurites

By Susan Celestian

Modified from an article originally written while curator of The Arizona Mining and Mineral Museum, Phoenix, Arizona

Recent thunderstorms have me thinking about lightning and its related phenomenon. Lightning both frightens and fascinates us, and while most lightning occurs within or between clouds, bolts that strike the ground can produce some interesting phenomena.

Turbulence in a cloud causes ice crystals to collide very energetically. Those collisions result in the buildup of electrical charges -- some positive, and some negative. Like-charged particles will separate from their opposites, and storm clouds tend to become polarized (for example, the cloud is commonly negatively-charged at its base, as heavier particles sink downward; and lighter positively-charged ones congregate across the top and sides. At the same time, a pool of charged particles (usually positive) accumulates on the ground under, and shadows a storm cloud. As an example: negatively-charged electrons at a cloud’s base ionize streaming gases. These streams act as ‘step-leaders’ that branch and stretch groundward -- at the same time positively-charged leaders on the ground stream skyward. When they meet, a conductive path forms between the ground and a storm cloud, and lightning bolts are instantaneously created, running from cloud-to-ground. See Figure 1. This is negative lightning, and bolts no wider than an inch can travel long distances, and reach very high temperatures and very high amperages. What appears to be the pathway of a single lightning strike, is actually typically four strikes that occur within nanoseconds. Lightning is VERY powerful!

Fulgurites continued on page 3.....
Upcoming Meeting Programs
Club President, Ed Winbourne has been working hard to schedule great programs for this season's club meetings. Below is a list of the current program offerings:

December: Rattlesnakes by Elizabeth Hughes AND Mid-Season Swap/Sale
February: Australia by Susan Celestian

Minutes continued….

December Meeting
- Rattlesnake Solutions still scheduled to talk about snake safety
- Possible silent auction (item/s approved by Stan/Sue)
- Misc.
- Agreed to purchase Bob’s UV light/box for $250.00
  ◦ Tabletop model; doesn’t require room lights to be turned off.
- Possible San Diego area trip for 2019
- Club letter of support for BLM proposal on opening Utah land for rec. digging.

Meeting adjourned at 6:00 pm
Respectively Submitted by Tiffany Poetsch, temporary secretary

Ho Ho Ho
Save the Date
Club Christmas Party
Friday, Dec 14th
Watch for an email with the details

Wire-Wrapping Class
4:30-6:30 pm
Prior to the meeting on
Tuesday, December 4, 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

Contiued...
Distances travelled -- up to 5-10 miles from storm

Temperatures -- 25,000° to 250,000°F, averaging 50,000°F

Amperage -- peaking at 20,000 amps
- average households electric circuits are 20-30 amps
- 0.2 amps can kill a person

About 5% of the time, lightning flows between negative charges on the ground and positive charges very high up in a storm cloud, as positive lightning. With a longer path to follow (up to 25 miles from precipitation), these bolts are about 10 times stronger than negative lightning, with currents up to 1 BILLION volts and 300,000 amps! Usually these strikes consist of only one bolt.

During any moment, an estimated 1500-3000 thunderstorms are ravaging Earth. These produce 50-100 lightning strikes every second. And when the Earth is struck, a record of the event MAY be produced -- in the form of a FULGURITE (see Figure 2). Whether or not a fulgurite forms is a function of the composition of the Earth materials, and the moisture content of that material.

FIGURE 1 The Formation of a Lightning Bolt As a conductive path between the positively-charged ground and the negatively-charged cloud, a branching and powerful bolt of lightning streaks groundward. Graphic by Susan Celestian

FIGURE 2 Fulgurite This fulgurite is one of many that formed along a buried wire that lay across a property in Queen Creek, Arizona. It is very vesicular and glassy, although there is a lot of sand and many rocks embedded in that glass. The yellow arrow points to a hollow center in a branch. Notice in the upper image how dendritic the form, and how small some of the branchlets are. The whole fulgurite is pretty fragile, and breaks fairly easily (although it isn't difficult to repair). This is probably because of the abundance of inclusions, which diminish the density of the glass. Photo by Stan Celestian
The word “fulgurite” derives from *fulgurate*, Latin for lightning. They can be recognized by their dendritic or rootlike structures created when, at temperatures exceeding 3200°F, sand and rock fuse to from a glassy amorphous silica material (lechatelierite). The center is generally a smooth, glass-glazed hollow, as the very high temperatures vaporize the sand, leaving bubbly or vesicular walls, rough with inclusions of sand and rock.

Fulgurites have formed as much as 49 feet below the Earth’s surface. Additionally, fulgurite branches may be many feet long, and they become smaller with depth. The longest excavated fulgurite is a discovery in northern Florida. One branch is 16 feet long, and the other is 17 feet long. Had the lightning bolt not reached the water table, where the current was dispersed, it very probably would have been longer.

During Arizona’s Summer and Fall storms, lightning strikes occur often. When out and about, look under power lines, areas of dry-ish sand (dunes, playa lake beds, washes, beaches). A local collector discovered a fulgurite group along a popular trail near Seven Springs. Like gold, fulgurites are where you find them. But be sure to wait until the storms pass. Remember, lightning typically strikes the highest point around!
### UPCOMING FIELD TRIPS

**WHEN:** COALITION TRIP - December 15, 2018  
**WHERE:** Camp Verde  
**WHAT:** Pseudomorphs -- calcite, aragonite & gypsum after glauberite crystals  
**MEET:** 9:00 a.m. at Burger King just off I-17 at exit for Camp Verde Hwy 260. Leaving at 9:30.  
**LEADER:** Nelson Avery, Verde River Rockhounds, 928-301-7147  
**OTHER:** The road can get pretty rough in spots. Shouldn’t need 4-wheel drive, but will need high clearance. Will be required to sign a Notice of No Insurance - Field Trip Practices - Safe Practices

**WHEN:** December 16, 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

**WHEN:** January TBA, 2019  
**WHERE:** Black Pearl Mine on Aguila Rd.  
**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! Portable UV lights will be coming along for the ride.

**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

### NEEDED: QUALITY MINERAL (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 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

### UPCOMING FIELD TRIPS

**WHEN:** April 6, 2019  
**WHERE:** TBA  
**WHAT:** TBA  
**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
At 5:30 p.m. on Friday, November 16, about 10-12 DMRMC members and one guest met for dinner at Mi Casa, in the Silverton Casino, Las Vegas, NV. Lively food and fellowship -- despite the waiter :-) The next morning attendees met for a foray to the Yellow Pine and Prairie Flower Mines. George and Linda even saw some, either wild or open range, horses!

The Yellow Pine Mine is a former Pb-Zn-Ag-Cu-Au-Hg-Sn (lead-zinc-silver-copper-gold-mercury-tin) mine, that operated between 1906-1928, in Porphyry Gulch. Hydrothermal mineralization took place in fault breccias, fractures, and along bedding planes within the Mississippian-age Yellow Pine Limestone, associated dolomite-sandstone-siltstone. Nearby is the Prairie Flower Mine, that subsequently was owned by, and connected to, the Yellow Pine Mine.

This is a drone’s-eye view of the Yellow Pine Mine. Photo by Stan Celestian

Yellow Pine continued on page 7…..
Yellow Pine Mine & Prairie Flower Mine

According to birdandhike.com, this species can retract into the soil for protection from the summer heat.

Mountain Ball Cactus (Pediocactus simpsonii)
NOT a volcano!

Deanne has been working out! Love your shirt!!!

Dead Joshua Trees stand as evidence of a fire. Often new plants emerge from the roots. Photo by Deanne Gosse

Silver-Gold Cholla (Cylindropuntia echinocarpa)

Pb-Zn-Ag-Cu-Au-Hg-Sn

Our fearless leader, Dave Haneline. Photo by Robin Shannon

Yellow Pine continued on page 9…..
There must be some treasure in all that trash!

Photo by Deanne Gosse

Club fellows shipping.  Right: Photos by Deanne Gosse  Left: Photos by Robin Shannon

Club guest hunting the dumps.

Photo by Stan Celestian

Yellow Pine continued on page 10.....
This marker was discovered by Robin. I looked up 3rd Liberty Loan 1918, and found out that it refers to the sale of World War I liberty bonds. By purchasing the bonds (sold by the Boy and Girl Scouts), U.S. citizens provided money to the war effort. The money provided for medical supplies, weapons, and vehicles. The Third Liberty Load Act specified the issue of war bonds worth $3 billion, that accrued interest at 4.5% for 10 years -- redeemable after September 15, 1928. (The First, Second, and Fourth acts provided additional crucial funding.)

This is a sample of breccia, mineralized with rosasite, galena and others. It is breccia, like this, that commonly acts as a conduit for hydrothermal fluids that create ore bodies.

On the left: Galena, dulled by weather. On the right: Broken, fresh and shiny surface.

Goethite -- a hydrous iron oxide. This specimen is dense enough to qualify as lapidary material. If you picked some up, give it a polish!

On the left: Hematite (iron oxide); on the right: Limonite: a mixture of various hydrous iron oxides. Both these materials form by the alteration of iron-bearing minerals when rocks are invaded by hydrothermal fluids. They are often indicators of ore deposits.

All mineral photos on pages 11 & 12 are by Stan Celestian.

Tilted sediments in the background of the Yellow Pine Mine. Testimony to upheaval.
Rosasite (blue-green) is a copper zinc carbonate hydroxide, and is a secondary formed in the oxidation zone of an ore deposit (in other words, it forms by the alteration of the ore minerals primarily deposited in a hydrothermal zone. Look closely at the picture on the left, and you will see clear, lustrous blades of Hemimorphite, a hydrous zinc hydroxide.

This is a massive/botryoidal specimen of Smithsonite (zinc carbonate). Some Smithsonite will fluoresce.

This vug is lined with bladed rosettes of Calcite, calcium carbonate.

ore (ôr), a noun: a mineral deposit from which a metal or valuable element can be extracted at a profit

Treasures of Dave Haneline: A Galena with micros of Hemimorphite & Rosasite PLUS two .50 caliber shells  Photo by Dave Haneline

Yellow Pine continued on page 12.....
These meteorological phenomena are haloes and sun dogs (parhelia). They form when the Sun’s rays are horizontally refracted by ice crystals in the atmosphere. In A, there is a $22^\circ$ halo and two sun dogs flanking the Sun both right and left, at about the same position above the horizon as the Sun. B is a close-up photo of one of the sundogs -- note that the rainbow colors merge from red on the inside, out into the white light of the perihelic circle (visible as the white streak extending out away from the sun dogs). A solar position near the horizon best generally results in the most conspicuous haloes and sun dogs.

In C you can clearly see the circumzenith arc (CZA), or “smile in the sky”. This occurs above the Sun, and this upside-down rainbow occurs at a distance of 46° from the Sun.

In D’, we can see three of the several potential haloes that form around the Sun in an icy sky. They are outlined in D”. They are the circumzenith arc, the $22^\circ$ arc, and the tangent arc (at a distance of 46° from the Sun).
FIELD TRIP TO BULLARD MINE  
NOVEMBER 24, 2018

This trip was the November Coalition Trip, hosted by our club. Ed Winbourne was the leader.

Yavapai County’s Bullard Mine was an underground copper-gold-silica-silver mine, that was discovered in 1885 (by J.C. Bullard), and in production from 1935-1956. The tabular ore body is hosted by a Miocene-age (15+ mya) andesite. Ore deposits occur as fracture fillings & veins along fault zones. At the Bullard, the primary vein can be up to 2 meters thick, within steeply-dipping mafic volcanics. The common minerals are chrysocolla & brochantite; less common are malachite & chalcopyrite. Native gold also occurs in association with iron oxides. Gangue minerals include: hematite, pyrite, quartz, calcite, barite, & fluorite. The minerals were emplaced by hot basin brines (13-17 weight-percent NaCl at 446°-590° F).

There are about 2000’ of tunnels/shafts throughout the 25 (per a June, 2000 report for Canadian Mining Company Ltd.) patented lode mining claims, scattered throughout the 500 acres encompassing the Bullard Mine.

♦ 1888-1889 -- Smelter built by Yuma Copper & Silver Co. (shut down due to the fact that coke and anything else needed for the operation had to be hauled from Maricopa, site of the nearest railroad station)
  ♦ 1895 -- John Bullard acquired the land vacated by the Yuma Copper & Silver Co.
  ♦ 1907 -- John Bullard establishes patented claims
  ♦ 1913 -- A.S.& R Co. (now ASARCO) reports Au 0.25% & Cu 2.67%  
  ♦ 1939 & 1941 -- Bullard Gold Mines Inc. shipped about 5500 tons of ore
  ♦ 1944 - U.S. Bureau of Mines drilled 4 core holes
  ♦ 1935-1956 -- 64,000 lbs Cu, 3300 oz gold, 5900 oz silver produced

  ♦ 1979-1981 -- shipped 4000 tons of silica flux to Hayden smelter

♦ 1981-present -- Drill coring and geological evaluations by NRG Resources, Unity Mining Company, Resource Exploration and Development, Freeport McMoRan Gold Co., and Cominco American Resources Inc. Numerous reports noted the economic potential of this area for gold, but no development has been conducted.

Bullard Mine continued on page 14.....
STOP 1

The first stop of the day was near an adit, around which there were thick seams of calcite.  *Photos by Stan & Susan Celestian*

13 cars were in the caravan for this trip -- a good turnout!

Stan photographed a couple chunks of calcite from here, under plain and short-wave UV light.  *Photos by Stan Celestian*

Cynthia’s grandson, JR, dug out a nice hunk of cleavable calcite.  Good job JR!  *Photos by Susan Celestian*

*Bullard Mine continued on page 15....*
STOP 2

Footings of a smelter that operated for less than a year in 1888-9. The smelter sat on the banks of a stream.

Photo by Susan Celestian

You can see the concrete walls and floor of a water collection basin, built within the creek bed, at the base of the smelter furnace.

Photo by Susan Celestian

Bubbly, glassy and signs of flow -- classic slag

Glassy slag (iron-rich dregs from the smelting process) is enthusiastically collected by trip attendees!

Photo by Stan Celestian

Bullard Mine continued on page 16…..
Above the smelter there are a few walls remaining from a building associated with the smelter operation. Nearby, in the creek bed, is a structure of unknown identity -- a well perhaps?

*Photos by Stan and Susan Celestian*
STOP 3 This view of the hill above the 3rd collecting stop demonstrates the fault control on the mineralized zone. The white arrows point to adits pocking the hillside. Note that they align roughly along a line (yellow) - not helter skelter. Faulted rocks are porous and allow water to penetrate, plus provide spaces for deposition of minerals. Notice also that the rocks, of the mineralized mountain, are rust-red. This is a sign that the rocks have been hydrothermally altered -- a process that causes chemical changes to iron-rich minerals, such as pyrite and chalcopyrite. A product of those changes is the release of iron oxide ("rust"). So when prospecting, look for rusty rocks!

Photo by Susan Celestian

TRIP LEADER, ED WINBOURNE
Photo from Ed’s Facebook page
...Bullard Mine continued from page 17

Malachite  Photo by Stan Celestian

Chrysocolla and Malachite  Photo by Stan Celestian

Pistachio-green Epidote  Photo by Stan Celestian

Probably Chalcalumite  Photo by Stan Celestian

Another big yard rock for Deanne  Photo by Deanne Gosse

**Chrysocolla**

$\text{Cu}_2\cdot\text{Al}_x(\text{OH})_y\cdot n\text{H}_2\text{O}$ or $(\text{Cu, Al})_2\text{H}_2\text{Si}_2\text{O}_5(\text{OH})_4\cdot n\text{H}_2\text{O}$

**Malachite**

$\text{Cu}_2(\text{CO}_3)(\text{OH})_2$

**Chalcalumite**

$\text{CuAl}_4(\text{SO}_4)(\text{OH})_2\cdot 2(\text{HP})_3$

**Brochantite**

$\text{Cu}_4\text{SO}_4(\text{OH})_6$

Porphyritic Andesite, often a host rock at the Bullard Mine  Photo by Stan Celestian

Bullard Mine continued on page 19...
In case you didn’t make it to the top of the ridge, here is what you would have seen:

Beware the strong odor of cat -- big cat...
Toward the end of the day, Stan and Sue decided to drive around to the north side of the mountain, where the primary Bullard opening and ore chute are located. Here is what they saw:

There is an ore chute right outside a significant adit. In the report to the AZ Dept of Mines & Mineral Resources, this is the view used for the Bullard Mine. Photos by Susan Celestian

There were numerous inclined workings, as miners followed inclined mineralized fault zones. Photos by Susan and Stan Celestian
...Nature at the Bullard

Deanne’s first Tarantula. This is a male (males are black) Arizona Blonde Tarantula (*Aphonopelma chalcodes*). Males live 10-12 years; females 20 or more! *Photo by Deanne Gosse*

This is a Tarantula Hawk (Pepsis sp.). These wasps paralyze tarantulas, and drag them to their nest, and lay an egg in the ‘carcass’. They are fairly docile to humans, but their sting is the second most painful in the world -- eclipsed only by the Bullet Ant. *Photo by Deanne Gosse*

Footprint of Javelina or Collared Peccary (*Tayassu tajacu*) *Photo by Susan Celestian*

Desert Mallow (*Sphaeralcea ambigua*) *Photo by Susan Celestian*

Teddy Bear or Jumping Cholla (*Cylindropuntia bigelovii*) *Photos by Stan Celestian*
UPCOMING AZ MINERAL SHOWS

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. See Poster on page 8

November 17-18 - Mesa, AZ  Apache Jct Rock and Gem Club; Skyline High School, 845 S Crimson Rd.; Sat 9-5, Sun 10-4; Admission: $3 adults, $1 students, children 12 and under 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.

December 1 - Cornville, AZ  Verde River Rockhounds; Windmill Park, 9950 E Cornville Rd.; Sat 9-4; Admission: free. See Poster on page 9

January 1 - February 28 - Quartzsite, AZ  Various shows: Desert Gardens, Tyson Wells; For more information go to: https://www.desertusa.com/cities/az/quartzsite.html

January 4-6 - Mesa, AZ  Flagg Gem & Mineral Show; Mesa Community College, Dobson north of Rte 60; Fri-Sun 9-5; Admission: Free. See Poster page 10


March 16-17 - Anthem, AZ  Daisy Mountain Rock and Mineral Club; Boulder Creek High School Gym, 40404 N Gavilan Peak Pkwy; Sat 9-5, Sun 10-4; Admission: $3 adults, $2 seniors and children, children 12 and under free.

April 5-7 - Tempe, AZ  Flagg Mineral Society 2019 Minerals of Arizona Symposium; Drury Inn & Suites, 1780 W Ranch Rd, Tempe, AZ; Fri 3-5 Micro-mineral Session, 5-10 Mineral Sale, Sat 8-4 and 6 p.m. banquet; Sun 9-11; Registration required. http://flaggmineralfoundation.org/home/minerals-of-az-symposium/

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

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 Nancy Gallagher.

GROUPWORKS
As a DMRMC club member, your name should already be available at https://app.groupworks.com/#/login. If you have not done so already, create an account and you will receive reminders about club events and meetings, and any important club information. You may also post pictures and information -- all seen only by club members.

Officers, Chairpersons, & Trustees

President: Ed Winbourne…ewinbourne@gmail.com
Vice President: Stan Celestian
Secretary: Victoria Peterson …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…stancelestian@gmail.com
Show Chair: Ed Winbourne
Trustees:

Cynthia V  Claudia M
Susan C  Tiffany P
Tammy E  Jim R
Bob E  Witt R
Jennifer G  Howard R
Stan Care  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
Verde River Rockhounds
Present
“Rocks in the Park III”
Rock and Mineral Sale
Saturday December 1, 2018
9 A.M. - 4 P.M.
Windmill Park, Cornville Road
Cornville, AZ 86325
47th ANNUAL
FLAGG GEM & MINERAL SHOW

JAN 4-6 2019
MESA COMMUNITY COLLEGE
NE CORNER OF US 60 & DOBSON ROAD 9AM - 5PM

THE TAILGATE SHOW TRADITION CONTINUES!
FREE ADMISSION  FREE PARKING  FREE SAMPLES FOR KIDS

FOR MORE INFORMATION
WWW.FLAGGSHOW.INFO
FLAGG MINERAL FOUNDATION  P.O. BOX 41834 | MESA, AZ 85274
62nd ANNUAL GILA COUNTY GEM & MINERAL SHOW

Donations: $3.00 Per Person
$5.00 Per Couple

Students & Children -- FREE

Crack Open “Dinosaur Eggs” and “Geodes”

Join in the Fossil Dig

Lots of Children’s Activities, Demonstrators and Vendors, Lapidary Equipment/Tools, 40+ Specimen Displays, Hourly Door Prizes, and Much, Much More!!

January 11th & 12th: 9am—5pm
January 13th: 10am—4pm

Gila County Fairgrounds

FOR MORE INFORMATION:
Jodi Brewster
President
(623) 810-9780
OR
Jerry Kastner
Vendor Chairman
(520) 401-6715
www.gilagem.org
2019 ANTHEM GEM & MINERAL SHOW

March 16th-17th

@ Boulder Creek High School
40404 N. GAVILAN PEAK PKWY
ANTHEM, AZ

SATURDAY MARCH 16 9am—5pm
SUNDAY MARCH 17 10am—4pm

www.dmrmc.com

Find us on Facebook

Kids Activities, Jewelry, Gems, Minerals, Fossils, Fluorescents, Beads, Wire Wrapping, Geodes, Raffles

Adults $4, Seniors and Students $2, and Kids 12 and under are FREE