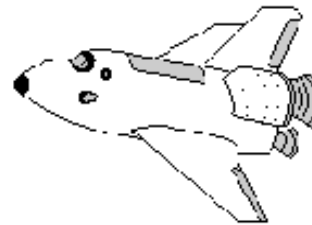
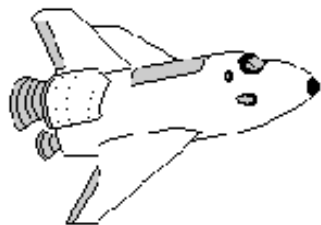


# ROCKET CITY ROCKS & GEMS



*The Monthly News Bulletin of the Huntsville Gem & Mineral Society, Huntsville, Alabama*

Volume 48 No. 8

*"We'll go to the Moon for a Rock"*

August 2016

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## August 23 Program –

**Mike Harrison will present "The Joy of Tumbling".**

Mike will be demonstrating rock tumbling equipment and the media used to polish rocks. This will be very informal and all are encouraged to contribute what works for them. Bring your best and favorite tumbled specimen and share how you did it



**Visit us at [www.huntsvillegms.org/](http://www.huntsvillegms.org/) and [www.facebook.com/HuntsvilleGMS](https://www.facebook.com/HuntsvilleGMS)**



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## Minutes of the July 26, 2016 Meeting

Vice President Mindy Schell opened the meeting at 6:31p.m. (President Mike Harrison could not attend.) There was no regular meeting in June and no minutes from the picnic.

### Treasurer's Report

Mindy announced that we have \$4,468.00 in our account. (Treasurer Clara Goode could not attend.)

### Metalsmithing

Mindy announced that new classes will start in August. Due to the large number of people interested, we will have another lottery to select names for first choices of class dates. To sign up, see Mindy tonight.

### Jewelry Activity Group

Mindy thanked Sheila Tesh for teaching her class on pearl knotting, and Leslie Malakowsky for teaching her class on beaded bezels. If you have class ideas for August and September, contact Mindy. JAG will end for the year at the end of September.

Mindy announced that we had a successful "show and tell" party on Tuesday, July 19th for all 3 interest groups. Folks showed off their hand crafted cabochons, jewelry and metalsmithed pieces. We also enjoyed refreshments and door prizes.

### Pebble Pups Stuff

Brian Burgess, Pebble Pups coordinator, announced that Jim Lacefield gave a program on Alabama geology at the July 21st meeting. Mr. Lacefield also hosted a trip to Cane Creek Canyon Nature Preserve in May where folks found yellow, orange and red agate "balls". (Thanks to Chris Kalange for explaining the geology of Cane Creek Canyon to the pups!) The next pup meeting will be August 18th, and the program will be about weather. The pups' age group is 8 - 13 years.

### Field Trips

Brian reported that we had a successful trip to Clarksville, GA in June to look for kyanite. Caryl, Mindy, Shelley, Chris, Liz & Don Cooper also attended. For more information, see "Field Trip Follies" in the July newsletter.

Brian is working with the Memphis Archeological and Geological Society ([memphisgeology.org](http://memphisgeology.org)) on the Richardson Landing trip where you can find fossils, Lake Superior agate and red agate. The site is North of Memphis near Millington. When the water level in the river is down, we'll have a trip there. He'll have sign-up sheets when the site is accessible. Contact him if you want to go. He is also scouting for a good shark tooth collection site.

The shatter cone trip to Wells Creek in Southern Tennessee is tentatively scheduled for September. (It's on private property.) Stay tuned for more information.

The DMC (Dixie Mineral Council) trip to the Cowee Mountain Ruby Mine in Franklin, NC is Saturday, August 20th, 2016. This is an official trip of the Huntsville Gem and Mineral Society and the Franklin, NC Gem and Mineral Society (which is the host). For more information, see "Dixie Mineral Council Field Trips" in the July/August newsletter.

### Lapidary Shop News

Bill Friday is continuing to recertify shop users. To schedule an appointment, contact him. (He'll be at the senior center next Tuesday, August 2nd.) Recertification takes about 10 minutes in which Bill explains the proper practices for using the lapidary equipment. His goal is to prevent both equipment abuse and personal injury. He also announced that he just bought a new drum of oil.

### Hospitality

Caryl Nixon announced that she has lost her co-chairs, and that she needs help with hospitality. Specifically, she needs someone who can take over when she's out of town. To help with hospitality, contact Caryl.

### 2016 Show News

Tony Smith announced that we are 2 months and 1 week away from the show. The show will be held in the Jaycees Community Building again. This is a good opportunity to meet other rockhounds. The dates are October 7th, 8th, and 9th. Set up will be Thursday, October 6th at 7:30 a.m., and the set up dinner will be Thursday, October 6th at 6p.m.

We have a full slate of dealers. Some dealers will have small hand tools for sale. Tony is arranging free coffee for the dealers. There will be no Boy Scouts again this year. But we will have kid friendly programs on a rotating schedule throughout the weekend.

We still need volunteers for the various committees. Lori has sign-up sheets tonight. She needs help with tickets, the gem dig and displays. To help in a specific area, contact Lori. Tell her your first choice of when you can help. (Lori announced that she will be stepping down as the Show Volunteer Coordinator at the end of the year due to health issues.) For more information, see "2016 Fall Show Volunteer Signups" in the current newsletter.

Monday there will be 5,000 rack cards ready for distribution. Tony has 8 1/2" x 11" flyers available tonight, and he'll have 11" x 17" posters at the next meeting. Lowell cautioned that when you distribute the 1/4 size flyers, be sure to check with the store owners first. 9 billboards will be up before the show. We got a good deal on the electronic signs.

We have a contract for radio advertising, and Lowell is working on advertising via other media (TV, magazines - such as Lapidary Journal and Rock & Gem - and social media. Lowell commented that we need to maximize exposure on social media. He will send email in August about advertising. He suggested advertising on companies' Facebook pages. Brian will ask the Space & Rocket Center to advertise the show. We need someone to update our website (Jennifer is not available).

**[Continued next page]**

**[Minutes Continued]****2016 Nominating Committee**

Mike Harrison appointed Bill Friday as chairman for the 2016 nominating committee. Bill needs 2 more people to serve on the committee. The search for nominees will be in September, the slate will be published in October, and voting will be in November.

**Other Announcements**

- Mindy announced that the 2016 SFMS classes at William Holland School of Lapidary Arts and Wild Acres Retreat Center are listed in the current newsletter. You can also check the SFMS website. Shelley commented that most of the SFMS class instructors donate their time. There are no instructor fees but you may have to provide your own materials. The cost is \$350.00 for lodging and plenty of food for the week. Sign up soon while classes are still available.

- Mindy commented on the quality of our newsletter which includes lots of photos, useful information, interesting articles, announcements and more - something for everyone! To contribute to the newsletter, contact editor Bill Friday.

- Mike Soroczak spoke about the theft of Brian Rhode's kaleidoscope jasper. There are 2 color photos of this jasper in the digital version of the newsletter. You can also find more information on the internet. If you see any of this material for sale, please contact Mike S. or Brian Rhode. For more information, see "Help Wanted - Stolen Minerals" in the July newsletter.

- After Leon Cole's program on rock carving, we had door prizes for new members or first time visitors Greg Hages, Ray Hunt, Beth Durham, James Elana (Mike & Myra's nephew), Thomas, Beth, and Van King (who is a member of the Alabama Archaeological Society).

Meeting adjourned at 7:50p.m., and refreshments were enjoyed! **Submitted by Leslie Malakowsky, Recording Secretary**

**Fall Show Reminders**

We request that every member use every possible medium to advertise the show: word of mouth, Flyers (which will be available at the August meeting), Facebook, Twitter, Instagram, Pinterest, etc. Although we are approaching Radio, TV, and print media, Social Networking is the most effective tool today.

**30 sec. Radio/TV announcement for the WEEK OF THE SHOW**

The 49<sup>th</sup> Annual Gem, Jewelry, and Mineral Show will be this Friday, October 7, through Sunday October 9<sup>th</sup> at the Jaycee Community Center on Airport road in Huntsville. This is the largest jewelry show in the region and the ONLY rock, mineral and gem show. National and International Dealers will be there with fossils, gems, lapidary materials, art pieces, and finished costume and fine jewelry of every type and price. Bring the whole family! Kids can look for treasures in the gem dig, mining flume, and more! The 49<sup>th</sup> Annual Gem, Jewelry, and Mineral Show THIS weekend! Learn more at Huntsville G M S dot ORG.

**Short narrative**

The 49th Annual Gem, Jewelry, and Mineral Show will be Friday, October 7, through Sunday October 9th at the Jaycee Community Center on Airport road in Huntsville. This is the largest jewelry show in the region and the ONLY rock, mineral and gem show. National and International Dealers will be there with fossils, gems, lapidary materials, art pieces, and finished costume and fine jewelry of every type and price. Bring the whole family! Kids can look for treasures in the gem dig, mining flume, and much more! Fascinating displays and demonstrations. Hourly drawings. Food service. FREE parking. The 49th Annual Gem, Jewelry, and Mineral Show

**October 7-9. Learn more at [Huntsvillegms.org](http://Huntsvillegms.org).**

Location: The Jaycee Community Center at the old airport, 2180 Airport Road, Huntsville, AL 35801

Dates and Hours:	Friday, October 7	10:00 am to 6:00 pm
	Saturday, October 8	10:00 am to 6:00 pm
	Sunday, October 9	12:00 pm to 5:00 pm

Donation suggested: \$3 for adults. \$1 for primary & secondary students.  
Children under 5 FREE. \$5 for adult Weekend passes

Web site: [www.huntsvillegms.org](http://www.huntsvillegms.org) Contact: 256-534-8803

# Update on the Upcoming 2016 Fall Show

## 2016 FALL SHOW VOLUNTEER SIGNUPS

Many Volunteers Are Needed for Our Show this October

Many of us are busy organizing the Club's annual Gem, Jewelry, & Mineral Show for Oct. 7 - 9 this year. It will be at the Jaycees Community Building again at 2180 Airport Road S.W. in Huntsville (on Jaycee Way). Our new location is better, but it still takes lots of help from all of our members to make it a good show. It's a great opportunity for members to get together and learn more about gems and minerals, and it can be a lot of fun. We also get to teach others about our hobby and make money to support the Club's many activities. So please mark your calendars now for Oct. 5 - 9, Wed. to Sun.) and plan to help out as much as you can.

There are several different Activities/Areas to help with:

- (1) Wed., Oct. 5, we'll need a few Volunteers to mark the Show Layout on the Jaycees Building floor, and others to load up the Club's Show Supplies at the Winchester Storage Unit and unload it at the Jaycees Building.
- (2) Set-Up Day - Thurs., Oct. 6, from 7:30am to about 6pm - we'll need a lot of workers to help unload Club and Dealers' supplies and equipment at the Jaycees Building and help set them up.
- (3) Set-Up Dinner - Thurs., 4:30 on. The Dinner is at 6:00, for Dealers and Volunteers, and we'll need workers to set it up, serve it, and clean up after it. We'll also need lots of Food Donations for it.
- (4) Thursday we'll need some members to bring in and set up Displays of their collections to put in cases which the Club provides. If a few members want to combine their treasures in one Display, that's great, too.
- (5 - 10) During the Show, on Fri., Sat., & Sun., we'll need workers for the Ticket Table, Information Booth, Mining Flume, Gem Dig, Kids' Activities, and Demonstrations of faceting, cabbing, carving, jewelry-making, etc.
- (11) At 5pm on Sun., we'll start our Take-Down, and it'll take a lot of workers to take everything apart and load it back up.

We'll also need to have 1 or 2 Work Days at our Storage Unit on Winchester Road in Aug. or Sept. to repair Display Cases and other items. And Bagging Sessions will be needed for the Flume material, and other Sessions to break up Gem Dig material and load it into the Cart. Please watch for announcements of dates and times to help out with these.

We have some of the Chairmen we need, but still need a few more. Caryl Nixon is Chairing the Set-Up Dinner, Ben Carroll is Chairing the Ticket Table, Deb Neiss is Chairing Demos, Brian Burgess is Chairing the Kids' Activities, Mark Habercom is Chairing the Mining Flume (and would love to train someone to take over for him), and I'll be Chairing the Info Booth and Dinner Food Donations. We still need Chairs for the Gem Dig and Displays, so please think about helping with these. Feel free to ask me any questions you might have about them, and let me know if you're interested. Due to health issues, I'll be stepping down as Volunteer Coordinator after this year, so I'll be glad to train anyone who might be interested in taking this job next year. If you'd like to Volunteer to help with the Show in other ways, please sign up on the Sign-Up Sheets at the meetings, noting the days or times you prefer. Or you can contact the Chairman of the Area you're interested in directly, or me. Shifts during the Show are usually for 2 hours, but any help is appreciated. If you have any questions, feel free to ask Tony Smith, the Chairmen, or me. My phone # and e-mail address are in the back of the Newsletter and on the Website. --Lori Willhoite, Show Volunteer Coordinator

## SFMS Workshops for 2016

Here is the remaining schedule for the Federation workshops at William Holland and Wild Acres. If you would like more information or a registration form, check out [www.SFMSworkshops.com](http://www.SFMSworkshops.com). Or our Facebook page at [www.facebook.com/Southeast-Federation-of-Mineralogical-Societies](http://www.facebook.com/Southeast-Federation-of-Mineralogical-Societies)

You can contact the Registrar for each facility:

William Holland—Heidi Wetzel [sfms.wh@gmail.com](mailto:sfms.wh@gmail.com)

Wild Acres — Toni Garland [waregistrar2016@gmail.com](mailto:waregistrar2016@gmail.com)

**This is a wonderful perk of belonging to the SFMS. Join in and support your Federation.**

### Session 2, Wild Acres, Aug 22-28, 2016

Fused Chain-Maille -Roy Deere  
Advanced Metalwork Special Proj. -Jeff Sheer  
Advanced Beading -Self Study  
Mineral ID -Travis Paris  
Display Case Building -Danny Griffin  
Advanced Metal Clay II -Katie Baum  
Wire Wrap—Beg. -Rowan Rose-Morgan  
Gourds -Pat Davis  
Metal Clay I -Katie Baum  
Deep Relief Wood Carving -Clancy Smith  
Chasing & Repousse' -Tom & Kay Benham \*\*

### Session 3, Wild Acres, Sep 19-25, 2016

Chain-Maille 1&2 -Roy Deere  
Gem ID -Teresa Polly  
Casting -Bill Harr  
Flint Knapping -Michael Miller  
Faceting—Beg. & Int. -Tom Mitchell  
Silversmithing -Pattie Appleby  
Advanced Chasing & Reposse II -Tom & Kay Benham  
Cold Connections & Enamel -Debora Mauser  
Scrimshaw -Rich Williams  
Wire for Beaders -Leslie Wayment

\*\* (for more info on this see <http://www.nancylthamilton.com/techniques/basic-chasing-and-repousse/>)



## Help Wanted—Stolen Minerals

I wanted to let you know about a claim jump in Oregon. Brian Rhode's Kaleidoscope Jasper Claim was jumped and quite a bit of jasper that was being stock piled for the Denver show and on line sales was stolen. Myra and I have purchased some of this Jasper from him, and I have samples I can show folks. If you see any amount of this material being sold at shows or on line, contact Brian Rhode on Facebook <https://www.facebook.com/The-Kaleidoscope-Jasper-Mines-185302251519157/>

Or they can get in touch with me and I will pass along the information to him -

Michael Soroczak <[mjsoroczak49@yahoo.com](mailto:mjsoroczak49@yahoo.com)>



## Metal-Smithing/Silver Group

By Mindy Schell

On 19 July, we combined our efforts with the Lapidary and Jewelry Group members for a Rockhound Party featuring Show and Tell cabochons, jewelry, and metalsmithing wares. There were over 30 people present for the festivities and we hope to do it again next year. Thanks to all that participated and volunteered to assist.

On 9 August, we had the Advanced/Experienced Metalsmith Group Kickoff with a small discussion on what this group will develop into with a number of ideas of what they would like to see with our metalsmith group future. Types of classes, materials, instruction, mentorship, and advanced tools were a small part of the discussion. Those that had not been certified stayed for the certification class and then we unveiled the metalsmithing/silver tools/equipment and supply store. We thank again Deb Neis and Shelly Curran for their group effort in organizing the wonderful tool collection we can use in our metalsmithing classes. Anyone that is an experienced/advanced metalsmith that would like to join us, please contact Mindy Schell.

Advanced/Beginning Smithing/Silver Certifications for HGMS Members are currently in progress for August. Project cost is \$5.

HGMS Certified Metalsmithers/Silver Artists meet on Thursday nights at 6 p.m. at the Senior Center Lapidary Room.



**Metal Bead by Deb Neis**

### Volunteer Positions

Program Manager ...	Mindy Schell
Metalsmithing Lead Instructor...	Kathy Bowman
Metalsmithing Project Instructors...	Shelley Curran & Opening
Safety Instructors	Mindy Schell & Karin Bath
Toolbox Signouts	Pat McKinney & Opening
Treasurer	Karin Bath
Kit Manager	Shelley Curran
Librarian...	Leslie Malakowsky

## Jewelry Activity Corner

By Mindy Schell

On 19 July we had the first annual HGMS Show & Tell Rockhound Party in the Paint Room at the Senior Center with over 30 HGMS members and new friends that spanned lapidary, jewelry activity, and metalsmithing groups. Among the many show and tell items were cabochons, jewelry, metalsmithing wares. I also hear there were some good sales and trades amongst friends. Refreshments were delightful. And some new members signed up.

On 21 July, Leslie Malakowsky led the “Beaded Bezel” Class. We all had a ball and learned the different skills and techniques in creating a bezel out of beads for our cabochons. Thank you Leslie for putting together the kits and taking the time to instruct us.



### **UPCOMING ACTIVITIES:**

**August** – No classes due to metalsmithing certifications.

**September** – Shelly Curran said she will put something together for us. Shelly has a wonderful skill in design and creativity. Stay tuned to our Facebook page to hear more.



# Pebble Pups - Jim Lacefield - Alabama Geology

Thursday July 19th 6:00 to 7:00pm - Space & Rocket Center



Please RSVP to Brian, 256-746-0641,  
bburgess771@gmail.com,

Michelle Amin from the National Weather Service will present our program for this month

The next two months tie together with this month.

September 15 - Erosion: Wind, Water, and Ice

October 20 - Discoveries from Erosion

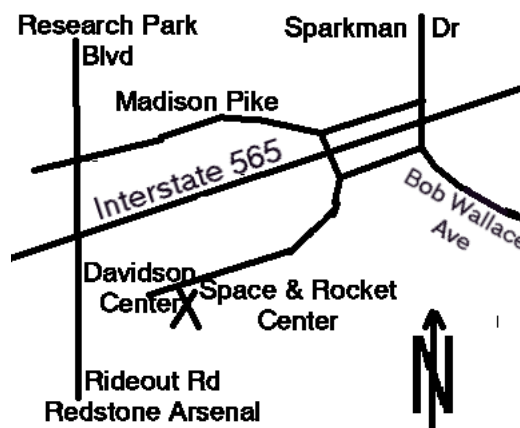


illustrations of.com 1-877-245-8566 service@illustrationsof.com

November 17— Where do Minerals Come From?



Kids ages 8 through 13 are invited to join this Junior Rock Enthusiasts Group. All participating families must have Family-Member status (the \$20 rate) in the HGMS and an adult family member must be present during the meeting. Pups family membership is an additional \$10/year. **We are now meeting at the Space & Rocket Center. Enter the Davidson Bldg (lower door closest to the Saturn 5 standing rocket)** Thanks



## Brad's Bench Tips

"Bench Tips for Jewelry Making" and "Broom Casting for Creative Jewelry" are available on Amazon

[www.BradSmithJewelry.com](http://www.BradSmithJewelry.com)

*Recommended as a good buy and good reading for all who like to have better lapidary skills.*  
S.S. <http://www.goodreads.com/author/show/>



### QUICK CLOSE-UPS

Often when trying to get a close-up photo with your iPhone or Android, you end up with a fuzzy, out-of-focus image. Next time try using your loupe over the camera lens. It works quickly and easily.



### LITTLE THINGS CAN BITE

Most jewelers treat motorized equipment with caution. We've all heard stories about workpieces coming loose in the drill press or about getting long hair or clothing caught in the polishing machine. It stands to reason that a machine with a motor of a half horsepower or so is going to win out over its operator. We all know that, and I'm not going to harp on it. That's not the point of this story.



I want to talk about the smaller motor powered machines we often use, the ones with little 3 inch diameter motors. For instance, these small motors are used in flexshafts and micro buffers. They're so small that many of us forget caution when using them. I'm guilty of it myself sometimes, and believe me it can get you in trouble. Here's what happened to two people I know.

One friend had a polishing bur bend in the handpiece and then whack the thumb that was holding the workpiece so badly that it seemed the bone might be broken. The swelling was substantial, and it took several weeks to regain normal use. A small underpowered motor? I don't think so.

Another friend was using one of the small buffing machines, the kind you can stop when you apply too much pressure to the wheel. Not to worry about such an underpowered beast you say. Wrong, it literally jumped up and bit the hand that feeds it !

Buffer was set on a low table to do a quick polish, so was not mounted or clamped. A buff was installed on the right spindle, no buff on the left. Friend was wearing a tight-fitting, long-sleeved sweater. While buffing on the right wheel, the left tapered spindle caught a thread on the friend's left sleeve and started grabbing more and more threads and sleeve.

Rather than pulling the arm into the machine, the light buffer quickly lifted off the table and started climbing up the underside of the friends arm. There was no way to get a hand of the on/off switch because the unit was spinning wildly and battering my friend like a club wielded by a mad man. Only when my friend could grab the gyrating power cord and yank it from the wall did the mayhem stop.

So when you're in the shop, please think safety. Don't take even those



## Mineral of the Month – Sunstone

By Leslie Malakowsky

As we move into the “dog days” of Summer, what better mineral to feature this month than sunstone? Sunstone is aptly named after the largest object in our solar system – the Sun (or Sol). Sunstone is a plagioclase feldspar. Its chemical formula is  $(\text{Ca},\text{Na})((\text{Al},\text{Si})_2\text{Si}_2\text{O}_8)$ . It's a member of the Triclinic crystal system, and its crystal habit is Euhedral with a granular appearance.



Sunstone can be colorless, yellow, red, green, blue or copper shiller (especially in Oregon sunstone). When viewed from certain directions, sunstone exhibits a chatoyancy or a [spangled appearance](#). This optical effect is due to reflections from inclusions of red [copper](#), in the form of minute hexagonal, rhombic or irregularly shaped scales that are oriented parallel to the principal cleavage plane. These inclusions give the stone an appearance similar to aventurine, hence sunstone is known also as "aventurine-feldspar." The middle of the crystal sparkles, and usually the color is darkest in the middle and becomes lighter toward the outer edges.

The feldspar that usually displays the aventurine appearance is oligoclase, although the effect is sometimes seen in orthoclase. Hence the two kinds of sunstone are distinguished as "oligoclase sunstone" and "orthoclase sunstone."

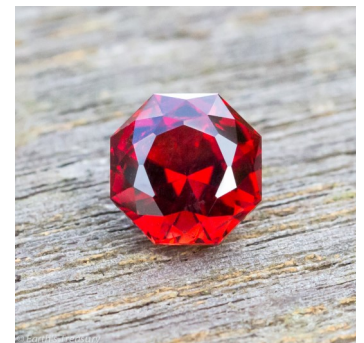
Sunstone was not common until recently. Previously the best-known locality was [Tvedestrand](#), near [Arendal](#), in South [Norway](#), where masses of the sunstone occur embedded in a vein of [quartz](#) running through [gneiss](#). Other locations include near [Lake Baikal](#) in [Siberia](#), and several United States localities—notably at [Middletown Township, Delaware County, Pennsylvania](#); [Plush, Oregon](#); and [Statesville, North Carolina](#). Sunstone is also found in [Pleistocene basalt](#) flows at Sunstone Knoll in [Millard County, Utah](#).<sup>[1]</sup>

The "orthoclase sunstone" variety has been found near [Crown Point](#) and at several other localities in [New York](#), and also at [Glen Riddle](#) in [Delaware County, Pennsylvania](#), and at [Amelia Courthouse](#), [Amelia County, Virginia](#).

The Oregon sunstone variety is found in [Harney County, Oregon](#) and in eastern [Lake County](#) North of [Plush](#). Oregon sunstone contains inclusions of [copper](#) crystals that can be up to three inches wide. The copper leads to variant colors within one stone in which turning the stone results in several different hues. The more copper within the stone, the darker its complexion. Oregon sunstone is the Oregon [state gemstone](#).

Sunstone may have been used in medieval times for orientation and navigation. One [medieval](#) source in Iceland, "[Rauðúlfs þáttur](#)", mentions that sunstone could be used to locate the sun in an overcast and snowy sky by holding it up and noting where it emitted, reflected or transmitted light. Sunstone is also mentioned in 13<sup>th</sup> century Icelandic texts and in 14<sup>th</sup>-15<sup>th</sup> century Icelandic church and monastic inventories.

References: Wikipedia



## Pyrite - By Dave Jacobson

This month we will take brief look at pyrite, iron sulfide,  $\text{FeS}_2$ . If you have ever heard the term "fools gold" it is referring to pyrite, due to the minerals color. But once you have seen real gold in a quartz matrix you will not confuse pyrite with gold. Most people who collect minerals have one or two pyrite specimens in their collections as they make beautiful specimens. Pyrite is very common and is found in all mineral environments. Some minerals associated with pyrite are quartz, calcite, gold, galena, sphalerite, and fluorite. A lot of gold ore is massive quartz shot through with pyrite where the gold is not visible by eye. Beautiful pyrite specimens have been found in many locations in the world. Fossils from some locations have even been pyritized.

Pyrite is a sulfide mineral in the isometric crystal system. Most pyrite has a pale brass-yellow color with a metallic luster. Parallel striations are very common on the crystal faces. These striations are one of the features that help in the identification of pyrite. Pyrite has a brittle to conchoidal fracture with no cleavage. It has a hardness of 6 to 6.5, with a specific gravity of approximately 5. Its streak is greenish to brownish black. It is insoluble in hydrochloric acid, but powdered pyrite dissolves in nitric acid. When powdered pyrite is heated it gives off a sulfur smell and leaves a small metallic, magnetic globule.

Pyrite gets its name from the Greek, *pyrites lithos*, which means "stone which strikes fire. Pyrite will spark when hit with a piece of iron.

I used the following reference materials in preparing this article.

*Field Guide To Rocks And Minerals* by Frederick H. Pough.

*Mineralogy For Amateurs* by John Sinkankus.

*Simon & Schusters Guide to Rocks And Minerals*.

*The Audubon Society Field Guide to North American Rocks and Minerals*.

Amethyst Galleries Mineral Gallery @ <http://mineral.galleries.com>).



## Marcasite Wikipedia—<https://en.wikipedia.org/wiki/Marcasite>

The mineral **marcasite**, sometimes called **white iron pyrite**, is iron sulfide ( $\text{FeS}_2$ ) with orthorhombic crystal structure. It is physically and crystallographically distinct from pyrite, which is iron sulfide with cubic crystal structure. Both structures do have in common that they contain the disulfide  $\text{S}_2^{2-}$  ion having a short bonding distance between the sulfur atoms. The structures differ in how these di-anions are arranged around the  $\text{Fe}^{2+}$  cations. Marcasite is lighter and more brittle than pyrite. Specimens of marcasite often crumble and break up due to the unstable crystal structure.

On fresh surfaces it is pale yellow to almost white and has a bright metallic luster. It tarnishes to a yellowish or brownish color and gives a black streak. It is a brittle material that cannot be scratched with a knife. The thin, flat, tabular crystals, when joined in groups, are called "cockscombs."

In marcasite jewelry, pyrite used as a gemstone is termed "marcasite" – that is, marcasite jewellery is made from pyrite, not from the mineral marcasite. In the late medieval and early modern eras the word "marcasite" meant both pyrite and the mineral marcasite (and iron sulfides in general).<sup>[4]</sup> The narrower, modern scientific definition for marcasite as orthorhombic iron sulfide dates from 1845.<sup>[2]</sup> The jewellery sense for the word pre-dates this 1845 scientific redefinition. Marcasite in the scientific sense is not used as a gem due to its brittleness. Marcasite reacts more readily than pyrite under conditions of high humidity. The product of this disintegration is iron(II) sulfate and sulfuric acid. The hydrous iron sulfate forms a white powder consisting of the mineral melanterite,  $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$ .<sup>[5]</sup>

This disintegration of marcasite in mineral collections is known as "pyrite decay". When a specimen goes through pyrite decay, the marcasite reacts with moisture and oxygen in the air, the sulfur oxidizing and combining with water to produce sulfuric acid that attacks other sulfide minerals and mineral labels. Low humidity (less than 60%) storage conditions prevents or slows the reaction.<sup>[6]</sup>

1. Handbook of Mineralogy

2. Mindat.org

3. Webmineral data

4 CNRTL (in French)

5. Klein, Cornelis and Cornelius S. Hurlbut, *Manual of Mineralogy*, Wiley, 20th ed. 1985, ISBN 0-471-80580-7

6. <http://www.nps.gov/history/museum/publications/conservogram/11-02.pdf>

## FIELD TRIP FOLLIES - Brian Burgess

Richardson Landing - North of Memphis near Millington on a Mississippi River gravel bar. This will be sometime soon in the summer now that the river is getting low enough for access. I am in contact with an individual that is monitoring the river level. Free



## Dixie Mineral Council Field Trips

### The Southeast Federation of Mineralogical Societies, Inc



The Friendly Federation - Founded in 1976 to serve  
DMC Program of the SFMS Field Trip Committee  
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**An Official Field Trip of the Gem and Mineral Society of Franklin, NC (HOST)**

**An Official Field Trip of the Huntsville Gem & Mineral Society**

**Cowee Mountain Ruby Mine**, 6771 Sylva Rd., Franklin, NC 28734 - [www.coweemtnrubymine.com](http://www.coweemtnrubymine.com)

**Saturday, August 20, 2016, 9am-6pm EST—240 miles from Huntsville, 4.5 hrs**

**Trip/History:** Gem mining has been evident in Macon County since 1870. Called corundum, the minerals found commercial value that Tiffany's found interesting and thus Franklin NC's nickname became The Gem Capital of the World. In the 1890's American Prospecting & Mineral Co and US Ruby Mining Co worked to find the Tiffany source but they left the area the early 20<sup>th</sup> century without ever finding it. The Cowee Mountain Ruby Mine has been in operation since 1984 and is still under the same ownership today. It is located off US Hwy 23 N. three miles from Franklin.

**Collecting:** You can find anything from ruby, sapphire, garnets, amethyst, topaz, smoky and rose quartz. The flume is 150 feet long, covered and lighted for your comfort. Food, clean restrooms and water comes with your native bucket, all for \$15. **Free parking and pets are welcomed, but must be kept on a leash at all times.**

**Fees:** \$15 per person, children under 12 are free. This fee includes one bucket of natural material, use of 150 foot flume and equipment, food (burgers, dogs, salad, fixings), free entry into the Franklin Gem & Mineral Museum, 25 Phillips St. from 12 pm until 6 pm, and free local entertainment near the Museum (12<sup>th</sup> Annual Folk Festival open all day and Pickin on the Square- 6:30 until...) bring a chair!

**RSVP:** All the participating club field trip leaders, send me a list of your total collectors and those staying for lunch by 08-17-16. Send to [marsha.harmon@frontier.com](mailto:marsha.harmon@frontier.com) or call 828 369-7262, for food count representation. Thanx, but just want to make sure we have plenty of food for you.

**Bring:** Old clothes, rubber gloves if you want (water is cold), cushion or old towel to sit on, tennis shoes/boots and a plastic bag for muddy shoes/clothes

### **DIRECTIONS AND WHERE TO MEET:**

From Huntsville AL, Hwy 72E to Interstate 24 to Chattanooga and I75 toward Knoxville. Take Hwy 64 east from Cleveland TN to Franklin, then go north on US 23 for 3 miles—mine is on the right.

**Accommodations:** There are many clean and comfortable motels as well as camp sites and rentals available to you. Franklin Chamber of Commerce [www.franklin-chamber.com](http://www.franklin-chamber.com) (828) 524-3161 Visitors guide can be down loaded

**Additional contacts:** Franklin Gem & Mineral Museum [www.fgmm.org](http://www.fgmm.org)

(828) 369-7831 M-Sat 12pm – 4pm or leave message

Marsha Harmon VP/Field Trip Coordinator





## August Birthdays

1 Lawana Cowart	15 Jan McGee
2 Joyce Walters	17 Marlene Hopkins
2 Lawrence Nelms	18 Karen Ryan
4 Brooks Glover	19 Barbara Decklman
6 Devona Hawkins	19 Jimi Sitko
6 Kayla Wilson	20 Emily King
10 Steven Basham	22 Scott McCoy
14 Larry Schreckengost	24 Karen Allen
14 Mary Spaulding	25 Debora Neis
15 Howard Kuettner	



## Anniversaries

August  
Peridot

1 Clara & Mike Goode	19 Julie & Tim Eve
3 Brian & Karen Allen	25 Jim & Ola Ann Lee
4 Florence Mims	26 Chris & June Kalange
9 Lowell & Betty Zoller	27 Elizabeth Lewis
18 Jacob & Teresa Roberts	30 Chris Stewart

## September Birthdays

1 Jennifer Pinkley	15 Jan McGee
1 Gayle Joyce	16 Charlie Willhoite
1 Wayne Hastings	16 Eric Emerson
3 Gerdy Wyatt	16 Michael Ray
5 Elke Ardal	16 Yamile Nuckels
7 Aubrey Eve	18 Samantha Lindberg
7 Mike Harrison	19 Mitzi Cartee
8 David Lehner	22 Bonnie Tanner
10 Marie Aldridge	23 Renee' Gunnink
13 Mark Falkenberg	29 Linda Lindberg
14 Larry Augsburg	30 Jonathan Lear
14 Sheila Tesh	30 Miria Finckenor

September  
Sapphire



## Anniversaries

1 Frank & Shelley Curran	18 Rebecca Purcell
6 Delora Ward	29 Mike & Theresa Chivers
Bruce & Allison Kowalczyk	30 Michael & Sharon Bedard
6 Roger Broussard & Jessica Babcock	

## August 2016 - Senior Center Lapidary Lab Schedule Lapidary, Silver Jewelry and Wood Carving

To use lapidary equipment, you must be certified unless a licensed instructor is present  
- currently: B. Friday, W. Falkenberg, & Chris Kalange

<b>Monday</b>	<b>7:30am- 9:00am</b>	<b>Open Lab: Lapidary, certified HGMS 60+</b>
	9:00am- Noon	Silver Jewelry - Ron West, Instructor - Seniors & HGMS 60+
<b>Tuesday</b>	<b>Noon -4:30pm</b>	<b>Open Lab: Lapidary, certified HGMS 60+</b>
	<b>7:30am-9:00am</b>	<b>Open Lab: Lapidary, certified HGMS 60+</b>
	9:00am—Noon	Silver Jewelry - Ron West, Instructor - Seniors & HGMS 60+
	Noon -3:00 pm	Silver Jewelry- Terry Clarke, Instructor - Seniors & HGMS 60+
	<b>3:00pm—4:30 pm</b>	<b>Open Lab: Lapidary, certified HGMS 60+</b>
<b>Wednesday</b>	<b>6:00pm-9:00pm</b>	<b>Open Lapidary &amp; Open Jewelry - certified HGMS 18+</b>
	<b>7:30am -4:30 pm</b>	<b>Open Lab: Lapidary - certified HGMS 60+</b>
	<b>6:00pm-9:00pm</b>	<b>Open Lapidary &amp; Jewelry - certified HGMS 18+</b>
<b>Thursday</b>	<b>7:30am -4:30 pm</b>	<b>Open Lab: Lapidary - certified HGMS 60+</b>
	9:00am-11:30am	Silver Jewelry- Ron West, Instructor - Seniors & HGMS 60+
	Noon-3:00pm	Wood Carving - Copeland, Instructor - Seniors & HGMS 60+
	<b>3:00pm-4:30 pm</b>	<b>Open Lab: Lapidary -certified HGMS 60+</b>
<b>Friday</b>	<b>6:00pm—9:00pm</b>	<b>Metal Smithing &amp; Jewelry Classes— HGMS 18+</b>
	<b>7:30am - 12:00am</b>	<b>Open Lab: Lapidary - certified Seniors &amp; HGMS 60+</b>

## 2016 HUNTSVILLE GEM &amp; MINERAL SOCIETY OFFICERS

President: Mike Harrison 256-797-2435

wm.harrison.123@gmail.com

Vice President—Mindy Schell 334-790-0671

mindy.schell@yahoo.com

Recording Secretary: Leslie Malakowsky, 256-755-0479

lmalakowsky@gmail.com

Treasurer: Clara Goode, 256-883-9194

clarag1964@gmail.com

Newsletter Editor: Bill Friday, 256-527-8227

bill.friday@earthlink.net

Directors at Large: Chris Kalange—ckalange@comcast.net

Bruce Kowalczyk—256-424-2197 arkowalczyk@aol.com

Brian Burgess, Ex Officio - bburgess771@gmail.com 256-746-0641

Federation Liaison - Charlie Willhoite - 256-340-3448—cdwillhoite@yahoo.com

2705 Jarvis Street S. W. Decatur AL 35603

## 2016 COMMITTEE CHAIRS

Membership: Bill Friday— 256-527-8227

bill.friday@earthlink.net

2508 Excalibur Dr. Huntsville AL 35803

Scrapbook: Dianna O'Dell, 256-828-1813

Librarian: Leslie Malakowsky, 256-755-0479

Club Publicity: Jennifer Pinkley 931-233-0420

Education &amp; Craftsmanship: vacant

Field Trips: Brian Burgess, 256-746-0641

Hospitality: Caryl Nixon 256-426-5061

caryl.nixon@outlook.com

Mineral ID: Wayne Falkenberg—

falkenbergwp@comcast.net (William Holland offers a class for this)

Property: Chris Kalange, 256-883-7627

ckalange@comcast.net

Program Chair—Myra Soroczak 256-446-9938 -

Soroczak@yahoo.com

Show Chair: Tony Smith, 256-603-3095.

Show Vendor Chair: Lowell Zoller, 256-534-8803

Show Volunteer Chair: Lori Willhoite 256-340-3448

2705 Jarvis St S. W. Decatur AL 35603

Show Publicity Chair: Tony Smith, 256-852-3210

Show Treasurer: Clara Goode, 256-883-9194

clarag1964@gmail.com

**PURPOSE OF THE SOCIETY:** The Huntsville Gem & Mineral Society is a non-profit educational organization for people interested in mineralogy, geology, paleontology, and related lapidary arts. Its primary purpose is the education of the members and the general public in these areas. This purpose is accomplished through programs, shows, lectures to school children and organizations, and exchange of rocks, minerals and artifacts.

**DUES:** Annual dues are \$15.00 per person, \$20.00 per family, and are due on January 1st of each year

Membership Applications may be found at our webpage [www.Huntsvillegms.org](http://www.Huntsvillegms.org), at meetings, or the lab

**MEETING PLACE:** Huntsville/Madison County Senior Center, 2200 Drake Ave, Huntsville, AL at 6:30pm.

**DATE:** Fourth Tuesday of each month except for June picnic/rock swap, Christmas Dinner and major holidays.

**Federation Liaison:** Huntsville Gem & Mineral Society, 2705 Jarvis St SW, Decatur AL 35603, Attn: Charlie Willhoite

The Society is affiliated with the American Federation of Mineralogical Societies ,  
the Southeast Federation of Mineralogical Societies, and the Dixie Mineral Council

**Federation Newsletters:**

**SFMS:** [www.amfed.org/sfms/lodestar\\_newsletter.html](http://www.amfed.org/sfms/lodestar_newsletter.html)

**AFMS:** [www.amfed.org/news/default.htm](http://www.amfed.org/news/default.htm)

**DMC:** [http://www.amfed.org/sfms/\\_dmc/dmc.htm](http://www.amfed.org/sfms/_dmc/dmc.htm)





## 2016-17 CALENDAR

- 23 Aug '16 - Regular HG&MS Meeting, Madison County Senior Center,  
2200 Drake Ave, Huntsville, AL 6:30pm
- 27 Sep '16 - Regular HG&MS Meeting, Madison County Senior Center,  
2200 Drake Ave, Huntsville, AL 6:30pm
- 6 Oct '16 - Thursday Setup for Fall Show, Dealers & Workers evening meal
- 7-9 Oct '16 - Fall HGMS Gem Jewelry Show - Jaycees Bldg, 2180 Airport Rd  
Sunday takedown 5:00
- 25 Oct '16 - Regular HG&MS Meeting, Madison County Senior Center,  
2200 Drake Ave, Huntsville, AL 6:30pm
- 22 Nov '16 - Regular HG&MS Meeting, Madison County Senior Center,  
2200 Drake Ave, Huntsville, AL 6:30pm
- 6 Dec '16 - **Tentative** - Christmas Dinner Meeting, Madison County Senior Center Cafeteria  
Catered Meal, bring an exchange gift if you wish
- 24 Jan '17 - Regular HG&MS Meeting, Madison County Senior Center,  
2200 Drake Ave, Huntsville, AL 6:30pm
- 28 Feb '17 - Regular HG&MS Meeting, Madison County Senior Center,  
2200 Drake Ave, Huntsville, AL 6:30pm
- 28 Feb '17 - Regular HG&MS Meeting, Madison County Senior Center,  
2200 Drake Ave, Huntsville, AL 6:30pm

See Pebble Pups Schedule on Page 7

Deadline for Next Newsletter— September 18, 2016

## Rocket City Rocks & Gems

Bill Friday, Editor  
2508 Excalibur Dr.  
Huntsville, AL 35803

HGMS August 2016

**Dated Material**  
**Do not Delay**