ROCKET CITY ROCKS & GEMS







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

Volume 57 No. 1 "We'll go to the Moon for a Rock" January 2025

INSIDE THIS ISSUE

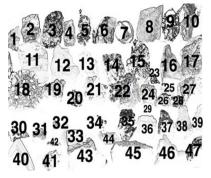
Meeting Jan 28, 2025 6:30pm

Fluorescent & Phosphorescent Minerals

What Causes the Effects?
Where are they found?
How to Care for them.
How to identify them.
How to best see the
different colors.
Cautions with UV lights



Fluorescent mineral key: This sketch is a key to the fluorescent rocks and minerals in the large color image at the top of this page. The fluorescent minerals in each specimen are: 1. Cerussite, Barite - Morocco; 2. Scapolite - Canada; 3. Hardystonite (blue), Calcite (red), Willemite (green) - New Jersey; 4. Dolomite - Sweden; 5. Adamite - Mexico; 6. Scheelite - unknown locality; 7. Agate - Utah; 8. Tremolite - New York; 9. Willemite - New Jersey; 10. Dolomite - Sweden; 11. Fluorite, Calcite - Switzerland; 12. Calcite - Romania; 13. Rhyolite - unknown locality; 14. Dolomite - Sweden; 15. Willemite (green), Calcite (red), Franklinite, Rhodonite - New Jersey; 16. Eucryptite - Zimbabwe; 17. Calcite - Germany; 18. Calcite in a Septarian nodule - Utah; 19. Fluorite - England; 20. Calcite - Sweden; 21. Calcite, Dolomite - Sardinia; 22. Dripstones - Turkey; 23. Scheelite - Inknown locality; 24. Aragonite - Sicily; 25. Benitoite - California; 26. Quartz Geode - Germany; 27. Dolomite, Iron Ore - Sweden; 28. Unknown; 29. Synthetic Corundum; 30. Powellite - India; 31. Hyalite (opal) - Hungary; 32. Ylasovite in Eudvalite - Canada; 33. Spar Calcite - Mexico; 34. Manganocalcite? - Sweden; 35. Clinohydrite, Hardystonite, Willemite, Calcite - New Jersey; 36. Calcite - Switzerland; 37. Apatite, Diopside - United States; 38. Dolostone - Sweden; 39. Fluorite - England; 40. Manganocalcite - Peru; 41. Hemimorphite with Sphalerite in gangue - Germany; 42. Unknown; 43. Unknown; 44. Unknown; 45. Dolomite - Sweden; 46. Chalcedony - unknown locality; 47 Willemite, Calcite - New Jersey. This image was produced by Dr. Hannes Grobe and is part of the Wikimedia Commons collection. It is used here under a Creative Commons license.



Web Page - www.huntsvillegms.org/ email - hsvgems@gmail.com









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Minutes from HGMS Pot Luck Meeting Dec 9th 2024. Shelley Curran, president called to order 6pm. The only business item was the need to approve recent changes to Constitution & Bylaws, which were published in the November newsletter. All in favor raised hands. None opposed. Changes approved.

Deb Epperson, acting Recording Secretary

There are still a few Fall Show Yard Signs out, so please return them to the Education Center at your earliest convenience.

Thanks, Shelley Curran



Metal Smithing/Silver Group by Kathy Bowman & Shelley Curran

Thursday February 6, Monday, February 10 (if we have a waitlist for the class)

Learning to make a hollow form is a great way to add another element to a piece of jewelry. A hollow form alone makes a nice pendant or a small accent (not included in the kit) can be added to en-

hance the pendant. Adding a hollow form with other stones is a good way to make a more complex piece without adding weight. The possibilities are endless. The class fee of \$6.00 is based on using a base metal however amount we will have silver available for an additional cost that can be used for the top.

The signup sheet will be available during Monday and Thursday night classes in January and at the HGMS monthly meeting. You can also sign up for this class by sending email to HGMS@wildivystudio.com.



<u>Certification/Safety Classes:</u> The next Certification/Safety Class is scheduled for Tuesday, March 18. Please send your name and contact information (name, email address, and cell phone number (for text messages) to <u>Certifications@wildivystudio.com</u> to get on the list for the class. Seats will be filled in the order I receive them. If you end up on the wait list, you will be added to the next scheduled class. Certification classes are scheduled approximately every other month. We only have space for 9 students per class so it will take several months before a seat is available. Currently the wait list is long.

CERTIFICATION CLASS INFORMATION – PLEASE READ CAREFULLY:

After Certification Class dates are set, email notices with information about the class(es) will be sent to everyone who is currently on the request list about a week before the scheduled date. You must reply to that email to be scheduled for the class or to request a future class. One reminder email will be sent to those who do not respond to the first email. If there is no reply after the 2nd email, your name will be removed from Certification Requests list. If you are still interested in Certification, you will have to send in your information again to get on the current list.

<u>Facebook Users:</u> The Metalsmithing class has our own page in Facebook groups. You can see info on classes, examples of project classes and other general information. Members of the group can post their finished class projects. Our class page is HGMS Metalsmithing Group.

The link: https://www.facebook.com/groups/438777169648170

Volunteer Positions *

Class Instructors:

Tools/Equipment Inventory Store Manager Kit Manager

Opening
Opening
Shelley Curran

Kathy Bowman Shelley Curran

Jan Edmunds (Monday AM)

Webpage & Social Media Management Kathy Bowman

*Note: We are all volunteers, so the schedule is subject to change.



Rocket City Jewelers (RCJ) News

RCJ is open to all HGMS members 16 and older. All skill levels are welcome! No certification is required, but experience using jewelry tools is a plus. We offer one class a month with 4 opportunities to finish the project. **Note:** If you're signed up to take the **Standing Tree of Life** (TOL) class, there are 2 more opportunities: **Jan 22nd, 6-9p, and Jan 29th, 2-5p.**

Please see the 1_{st} quarter 2025 class lineup below. To sign up for a class, please email Theresa at **rocketcityjew-elers@gmail.com** at least a month before class. Include your name, contact info, and the class(es) you want. You can also sign up at RCJ meetings and monthly HGMS meetings.

January: 7" Standing Tree of Life (TOL). You will need 3 or 4 strands of drilled rock chips and a fist sized rock to mount your tree on. Your base rock does not need to be smooth and shiny. You will have enough copper wire to make 17 branches. (Each of the 17 branches has 3 smaller branches at the top and each of those 3 can hold from 1-4 small chips. So, $17 \times 3 = 51$ branches x 4 chips = 204 chips needed at most.) You will hot glue the wires to your rock. Hot glue will be provided. Class \$5 for the wire.

Jan 22: 6 – 9p, make up.

Jan 29: 2 - 5p, make up.

2025 - 1st quarter RCJ Class lineup



February: Japanese Weave Chainmaille Bracelet. Make a chainmaille bracelet using the ZigZag Japanese weave and gold enameled copper (EC) rings. **Note:** There are no more kits, but you can contact Judy for the number of rings you need to purchase. If you purchase rings in a color other than gold EC, don't forget to provide your own clasp. Also, if you want to change your pattern or fill out the weave to make a wider bracelet, you can purchase 1 bag each of 18g 3.5mm gold EC (or your color) rings and 16g 5mm gold EC (or your color) rings. This will give you all the rings you need to make any other shape bracelet you like!

Feb 5 & 19: 6 - 9p, class and make up.

Feb 12 & 26: 2 - 5p, class and make up.

March: Links and Beads Bracelet or Pendant/Window Hanger. You will need to bring 4mm or 6mm beads to incorporate in your bracelet or pendant/hanger. If making a bracelet, choose from one of the styles shown. If making a pendant/hanger, you will also need 1, $\frac{1}{2}$ " to $\frac{3}{4}$ " (15mm – 20mm) wide coin bead drilled from side to side. You will sew your 4mm or 6mm beads around the edges to complement the coin bead.

Mar 5 & 19: 6 – 9p, class and make up.

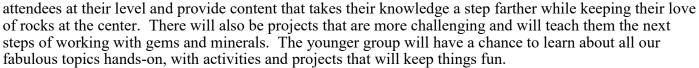
Mar 12 & 26: 2 – 5p, class and make up

Pebble Pups - Thursday January 23, 6:30 at the Education Center

Happy New Year to all our Pebble Pups and your families!

We are going to have some great topics for the Pebble Pups this year and we are going to start things off by learning about fluorescent minerals. You will learn why some minerals fluoresce, how to find them, and you will have a chance to find something fun to take home!

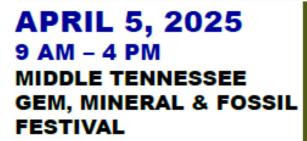
One of the big changes this year is going to be giving older attendees the chance to dive deeper into the monthly topics and learn so much more about them! Each base topic will remain the same for older and younger kids, but we want to engage all



We are also planning some fun field trips that will bring the group together to look for and learn about rocks in nature. Our first field trip is tentatively planned for March to Cathedral Caverns. Date will be announced once it has been identified and the deadline for responses will be one month prior to the date of the field trip.

Please join us for our meeting on Thursday, January 23rd at 6:30pm at the HGMS Education Center at the Sandra Moon Community Center, located at 7901 Bailey Cove Road SE, Huntsville, AL. We can't wait to see you there!

Your Pebble Pups Leadership Team,



The Middle Tennessee Rockhounds promotes mineralogy, paleontology, geology, and collecting, plus related arts & sciences.

Club meetings are every 3rd Tuesday of the month in Brentwood.

VISITORS ARE ALWAYS WELCOME! www.rockhound.org info@rockhound.org

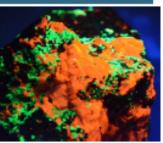




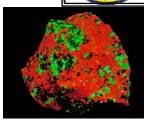












Mineral of the Month – Snowflake Obsidian By Leslie Malakowsky

Obsidian is mineral-like, but it is not a true mineral. It's a naturally occurring volcanic glass that forms as an extrusive igneous rock. (Glass is an amorphous, homogeneous material with a random liquid-like structure that generally forms due to rapid cooling.) Obsidian is sometimes classified as a mineraloid, a mineral-like substance that does not display crystallinity. Obsidian is a mixture of cryptocrystalline grains of silica minerals in a glass-like suspension, a super-cooled liquid. In the last stages of volcanic eruptions, when most of the other elements and the water in the lava are burned up, ejected or have flowed out, the remaining material chills at surface temperatures.

"Snowflake" obsidian is a variety of obsidian that is usually black with white, off-white or light brown snowflake-shaped crystal patches of the mineral cristobalite. Cristobalite is a silica polymorph (the ability of a solid material to exist in multiple forms or crystal structures) that, in the case of snowflake obsidian, forms as crystals or spherulites during partial crystallization as the glass cools. Other names for this variety of obsidian are "flowering" obsidian and "spherulitic" obsidian.



Obsidian was named after the Roman explorer Obsius because of its resemblance to a stone he found in Ethiopia that he named *obsianus lapis*. And the English translation of Natural History, an early encyclopedia originally written in Latin by Pliny the Elder, includes a few sentences about a volcanic glass called Obsidian.

Obsidian is commonly found within the margins of rhyolitic lava flows known as obsidian flows. Rhyolite is an igneous, volcanic rock of felsic composition. "Felsic" refers to rock that is rich in minerals that form feldspar and quartz. (Typically the silicon dioxide (SiO2) content of felsic rocks is greater than 70%.) The high silica content induces the lava to have high viscosity and polymerization (a chemical process that binds molecules together with a tendency to form glass and semicrystalline structures rather than crystals) that causes the obsidian to be hard and brittle. That is why obsidian has a conchoidal fracture with very sharp edges.

Obsidian is found all over the world; any place that has experienced rhyolitic volcanic eruptions. In the United States this includes Arizona, Colorado, Idaho, New Mexico, North Carolina, Oregon, Pennsylvania, Texas, Utah, Virginia, and Washington.

No obsidian has been found that is older than the Cretaceous age. This is because obsidian is metastable (a condition in which the material spends an extended time in a configuration other than its state of least energy) at the Earth's surface, and over time it becomes fine-grained mineral crystals. When newly formed, obsidian has a low water content, typically less than 1% water by weight. Over time, when exposed to groundwater, it becomes progressively hydrated forming perlite.

Historically, obsidian was used in cutting and piercing tools such as arrowheads, scrapers and blades. Analyses of ancient obsidian artifacts is instrumental in understanding prehistoric cultures. Today, obsidian is used by some surgeons for scalpel blades, although this is not approved by the US Food and Drug Administration (FDA) for use on humans. Obsidian is also carved for ornamentation, and it is a favorite gemstone for jewelry making.

References: en.wikipedia.org, mindat.org

Brad's Bench Tips

"Bench Tips for Jewelry Making" and "Broom Casting for Creative Jewelry" are available on Amazon www.BradSmithJewelry.com For those who enjoy these bench tips, I'm happy to announce a second volume is now available on Amazon. "More Bench Tips" includes 86









additional ways to save time, avoid frustration or improve quality at the bench. These new tips cover problems in fabrication, stone setting, casting, soldering and polishing.



FINISHING PIERCED PATTERNS

After sawing patterns there's always a little cleanup to do, and the smaller cut-outs can be a challenge. Needle files (7-8 inches) can get into the larger areas, and escapement files (4 inches) can get into some of the corners.

But I often find myself wanting even smaller files. I couldn't find them even at a watchmaker tools supply company, so I had to try something else. I ended up grinding down the tip of a 4" barrette file using a separating disk (or cutoff wheel) in the Dremel or Foredom.

Be sure to wear your safety glasses when using this tool. A flake of steel in your eye makes for a bad day.



MAKING FILIGREE WIRE

Making wire for filigree is quite simple. Take a double strand of 24-26 gauge sil-ver wire, twist it tightly, and then flatten it a bit. While the basics are straightfor-ward, here's a few tips that will quickly make you an expert with filigree.

Filigree looks best when the wire has a very tight twist. The way I do this is to start with dead soft wire and twist it until it breaks. It always seems to break on one end or the other.

I like to use a screw gun, although a Foredom also works well. You'll need a small hook in the spindle, either a cup hook from the hardware store or a nail that has been bent into the shape.

Be sure to keep a little tension on the wires as you twist. Then to get a real tight twist, I anneal the wire to relieve the workhardening and twist it a second time until it breaks.

The final step in prepping the filigree wire is to flatten it slightly with a planishing hammer or rolling mill. The amount of flattening is a personal preference. I like to reduce the diameter about 25%. The wire will be quite stiff at this point, so it's best to anneal it again before starting to make the filigree shapes.





The Huntsville Gem & Mineral Education, 7901 Bailey Cove Rd. SE, Huntsville AL 35802

Metal Smithing/Silver Instructors: Shelley Curran, Kathy Bowman, Jan Edmunds

Lapidary: Bill Friday, James Yack, Anthony Zwilling, Les Bartel, Theresa Chivers, Deb Epperson

Rocket City Jewelers: Judy Osmundson, Theresa Chivers, Leslie Malakowsky

Pebble Pups: Suzanne Miller, Angela Mendoza, Theresa Chivers, Dee Dee Morton, Bill Friday

Monday Metal Smithing/Silver 5:00pm - 9:00pm

Lapidary 1st Monday each month 9:45am-2:00pm (Except Aug and Sep)

Lapidary 6:00pm - 9:00pm

Tuesday Lapidary 9:00am - 2:00pm

HGMS Meetings 6:00pm - 8:30pm 4thTuesdays

Wednesday Lapidary 6:00pm - 9:00pm

Rocket City Jewelers 1st & 3rd Weeks - 6:00pm - 9:00pm Rocket City Jewelers 2nd, 4th, 5th Weeks - 2:00pm - 5:00pm

Thursday Metal Smithing/Silver 5:00pm - 9:00pm

Lapidary 6:00pm - 9:00pm

Pebble Pups 6:30pm 4th Thursdays

Friday Lapidary 6:00pm - 9:00pm

Saturday Metal Smithing 9:00am - 3:00pm irregular 1st Saturday of the Month

Lapidary 9:00 - Noon - First Saturday of the month

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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 and enjoyment of the members and the general public in these areas. This purpose is accomplished through programs and activities, shows, lectures to school children and organizations, and exchange of rocks, minerals, artifacts, and newsletters.

DUES: Annual dues are \$20.00 per person, \$25.00 per family, and are due on October 1st of each year Membership Applications may be found at our webpage www.Huntsvillegms.org or at the HGMS Education Center during a meeting or at one of our activity periods: 7901 Bailey Cove Rd SE, Huntsville, AL 35802 Meetings: 4thTuesday of the month except for March Auction, June picnic, Christmas Dinner and major holidays.

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

Federation Newsletters: DMC: http://www.amfed.org/sfms/ dmc/dmc.htm

SFMS: https://www.southeastfed.org/newsletter - new, under construction

AFMS: www.amfed.org/news/default.htm

2025 HUNTSVILLE GEM & MINERAL SOCIETY EXECUTIVE BOARD

President - Shelley Curran -

Vice President - Anthony Zwilling -

Secretary: Debbie Epperson -Treasurer: Theresa Chivers -Membership - Theresa Chivers -

Editor: Bill Friday -

Past President: Mike Harrison -

Directors:

James Yack -Ashlee Pool -James Mallonee -Doug Blakeslee -

2025 COMMITTEE CHAIRS

Property: Bill Friday

Program Chair—Bill Friday Webpage: Leslie Malakowsky, Auction Chair: Shelley Curran Membership: Theresa Chivers

Field Trips: Bill Friday Hospitality: open

Pebble Pups: Suzanne Miller

Show Chair: open

Show Vendor Chair: Shelley Curran Assistant Vendor Chair: Jan Edmunds Show Publicity Chair - Tony Smith

open

Show Treasurer: Theresa Chivers

Mineral ID: Lowell Zoller

Facility Administrator: Bill Friday

Publicity: Open

No More Birthday and Anniversary postings.

With over 500 active members in the HGMS, we find it difficult to continue including birthdays and anniversaries in the monthly newsletter. Apology to those with January, and subsequent, special dates, but we will still include the birthstone each issue.



January Garnet

2025 CALENDAR

- 25 Feb '25 Regular HGMS Meeting, Huntsville Gem & Mineral Education Center 7901 Bailey Cove Rd SE, Huntsville, AL 6:00pm
- 22 Mar '25 Sat Annual Rock Sale / Auction details to be announced
- 22 Apr '25 Regular HGMS Meeting, Huntsville Gem & Mineral Education Center 7901 Bailey Cove Rd SE, Huntsville, AL 6:00pm
- 27 May '25 Regular HGMS Meeting, Huntsville Gem & Mineral Education Center 7901 Bailey Cove Rd SE, Huntsville, AL 6:00pm
- 14 Jun '25 [Saturday] Annual HGMS Picnic, Monte Sano State Park
- 22 Jul '25 Regular HGMS Meeting, Huntsville Gem & Mineral Education Center 7901 Bailey Cove Rd SE, Huntsville, AL 6:00pm
- 26 Aug '25 Regular HGMS Meeting, Huntsville Gem & Mineral Education Center 7901 Bailey Cove Rd SE, Huntsville, AL 6:00pm
- 23 Sep '25 Regular HGMS Meeting, Huntsville Gem & Mineral Education Center 7901 Bailey Cove Rd SE, Huntsville, AL 6:00pm
- 10-12 Oct '25 Fall Gem, Jewelry, and Mineral Sale Jaycees Building, Airport Rd
- 28 Oct '25 Regular HGMS Meeting, Huntsville Gem & Mineral Education Center 7901 Bailey Cove Rd SE, Huntsville, AL 6:00pm
- 25 Nov '25 Regular HGMS Meeting, Huntsville Gem & Mineral Education Center 7901 Bailey Cove Rd SE, Huntsville, AL 6:00pm
- 9Dec '25 Christmas Dinner details as it gets closer possibly a great potluck dinner again at the Ed Ctr.

Deadline for Next Newsletter February 16, 2025



January 2025

Rocket City Rocks & Gems Bill Friday, Editor 2508 Excalibur Dr. Huntsville, AL 35803