THE MOUNTAIN GEM

Gem & Mineral Society of Franklin, North Carolina March 2020 Newsletter



Franklin Gem and Mineral Society

Club Officers and Board of Directors

President: Jane Morgan, (828-342-8703)
Past President: Al Pribble, (828-342-3119)
Vice President: Arlon Eldridge, (828-369-5271)
Secretary: Susan Fritz, (828-524-4936)
Treasurer: Lake Holland, (828-369-5421)

Assistant Treasurer: Kathi Walbridge, (828-349-9615) Museum Manager: Larry Ellert, (828-349-0774) Director (2020): Larry Ellert, (828-349-0774) Director (2020): Tom Parker, (828-342-3619) Director (2019): Diane Mason, (706-379-1718) Director (2019): Tom Sterrett, (828-349-3774)

Committees

Membership: Tom Parker and Diane Mason Museum Curator: Mark Laing, (864-910-1580) Curator Emeritus: Fred Plesner, (828-349-4224)

Museum Gift Shop: Nancy Hopp (828-508-0637), Anamay Rossomando

(828-349-2807)

Museum Workshop: Virginia Bennis (631-830-5403)

Publicity: George Fritz, (828-524-4936)

Field Trip Coordinator: Marsha Harmon, (828 369-7262)

Program Coordinator: Kathi Walbridge

Museum Calendar: Jay Mooney, (678-488-0620) Gemborees: Norm Holbert (828-634-0350) Education/Tours: Marsha Harmon, (828 369-7262) Asst Education/Tours: Ron Rossomando (828-349-2807)

Web Master: Melissa Barfield (803-724-8312)

Newsletter Editor: Stacy Walbridge [fgmseditor@gmail.com]

The Club is a member of the American Federation of Mineralogical Societies and the Southeast Federation of the Mineralogical Societies.





The Gem and Mineral Society of Franklin, North Carolina, is a 501 (c)(3) organization and donations may be tax deductible. Please remember us when planning your estate.

From the President Jane Morgan

Spring is in the air. the trees are budding, flowers starting to bloom and the birds are singing. As we all stay glued to our TV's and radios waiting for the next news of "The Virus" don't forget to



enjoy the little things in life. Go outside and sit and listen to the birds and see what is going on in your yard. Take a step away and clear your mind of all the terrible news that's out there. We could easily forget the little pleasures in our lives right now but we still have a lot to be thankful for. Panic has taken over most everywhere you go or listen to or see on social media. Be vigilante and disinfect your home and keep your hands washed and you should be fine. Hopefully, this will be over real soon and we can get back to normal. In the meantime, if you need anything give myself or some of the others a call.

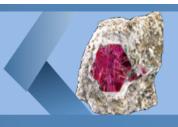
Oh and If your spouse/animal/children are driving you nuts being cooped up with you take comfort in knowing you're not alone. Millions of others are hanging on by a sheer thread of sanity. Enjoy your time together, stay healthy and I hope to see you next month.



Editor's Note: I've added a couple of extra articles and puzzles in this month's edition to help keep you occupied.

Club Newsletter: fgmseditor@gmail.com, Club Contact E-mail: franklingemsociety@gmail.com

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Franklin Gem and Mineral Society Minutes: February 27, 2020

Susan Fritz, Secretary Photographs by George Fritz

The meeting was called to order by President Jane Morgan on Thursday, February 27, 2020 at 6:30 p.m. in the downstairs meeting room at The Christian Church, Franklin.

<u>Minutes</u> – Jane Morgan asked if there were any corrections and/or additions to the minutes as printed in the monthly newsletter. There being none, Norman Holbert moved that the minutes be accepted and Mark Laing seconded the motion. Voted and passed.

<u>Treasurer</u> – Lake Holland reported we were in the plus column for the month of January.

<u>Membership</u> – Tom Parker was absent this evening. In his absence Marsha Harmon reported 39 members and 2 visitors present.



New Members Shelton Boyd (I) & Chuck Coulson (r) Photograph by George Fritz

<u>Curator</u> – Jane Morgan announced that Larry Ellert is stepping down from the Curator position and Mark Laing will become our new Curator. Mark asked that anyone making a donation of a specimen please indicate the state from where it came (if unsure what it is) or indicate what you believe it may be.

<u>Curator Emeritus</u> – Fred Plesner did not have anything new to report.

<u>Museum Manager</u> – Duane Haskell reminded everyone to please be certain to check that the back door of the museum is locked securely before leaving the premises

if you are the last person to leave. Jane Morgan announced that Duane Haskell is stepping down as Museum Manager and that Larry Ellert has agreed to step into this position.



Larry Ellert Museum Manager

Gift Shop – President Jane Morgan announced that Diane Mason and Vicki Knisley are stepping down as two of the co-chairs of the gift shop and that Nancy Hopp and Anamay Rossomando will now be the co-chairs.

<u>Publicity</u> – George Fritz did not have anything new to report.

<u>Newsletter/Publications</u> — Stacy Walbridge indicated the newsletter deadline is 03/13. He asked for assistance in receiving anecdotes and/or short articles. Send to: fgmseditor@gmail.com.

<u>Workshop Manager</u> – Virginia Bennis is absent this evening. John Hayes stated he and Al Pribble repaired the small trim saw. Gary Galbrecht, Jay Mooney and Jenny Mooney are among those who have recently attended classes.

<u>Tours</u> – Marsha Harmon has a tour for 15 senior citizens on Thursday, 03/19.

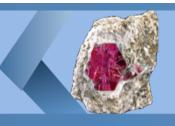
<u>Education/Field Trips</u> – Marsha Harmon has a trip planned for 03/29 to Summerville, Ga. This is an approximate 3-hour trip. Plans are to leave at 6:30 a.m. If interested, please let Marsha know.

<u>Gem Show</u> – Norman Holbert stated the next show will be May 10, 11 & 12. Club members are invited to become a vendor. A 6-foot table will cost members \$60 and two members can share. Sign up sheets are here tonight to volunteer for hosting, demonstrations, set up and take down.

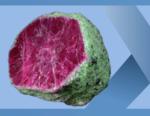
<u>Scholarships</u> - Al Pribble explained how our college scholarship program works as well as our \$300 minigrant program for teachers.

<u>Programs</u> – Kathi Walbridge said our next meeting would feature Stacy Walbridge who will present a program on Collecting in the Sonora Desert.

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FGMS Minutes (continued)

OLD BUSINESS:

Norman Holbert explained how volunteer hours are important and how volunteering can result in your obtaining a scholarship to William Holland by marking your volunteer hours in the book located at the museum.

Jane Morgan stated that if any new members who have not hosted previously are willing to host at the museum they will need to contact the museum manager to schedule a brief orientation.

Mike Hartman mentioned donating to The Gem & Mineral Society through the Amazon Smile program. There is also an app available for your phone. You can donate with each purchase. One-half of 1% is donated.

NEW BUSINESS:

John Hayes reported that his \$10 sapphire fundraising project was postponed due inclement weather and has been rescheduled for 03/05 at 6:30 p.m. Eleven have signed up to attend. If this is successful, another event may be held.

Norman Holbert made a suggestion regarding funding for refreshments. A raffle item could be offered at each meeting by selling tickets with that money going towards a fund for refreshments.

There being no further business, Duane Haskell made a motion for adjournment seconded by Lake Holland. The meeting was adjourned by President Jane Morgan at 7:10 p.m.

Door prize tickets were drawn. Delicious refreshments were served and provided by Matt and Christine Castor. Thank you!

Larry Ellert gave a presentation about the duties of a curator..

FIELD TRIPS

Marsha Harmon Photographs by George Fritz

Sunday, March 29: The schedule DMC trip to Patty Construction Quarry in Summerville, GA is **postponed** to a future time to be determined. It is about 3 hours away and is an easy place to pick banded agate for free. For those of you who like to pound on boulders, you can do that productively with the proper safety equipment or if you like to surface collect you can fill up your buckets that way.



Rough Agate from Summerville Quarry Collected by Gary Galbrecht

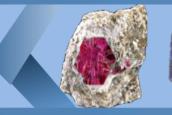
Most of the material here is suitable for cabbing or to keep as specimens as shown in the picture below.



Polished Summerville Quarry Agate Collected/Polished by Shelton Boyd

Saturday, April 18: The DMC field trip to Johnson Creek Farm is still planned. The Johnson

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Creek Farm is a relatively new site in Due West, South Carolina, not far from Diamond Hill. The site is known for amethyst, epidote, smoky quartz, beryl, and aquamarine. There are different areas in which to dig. There is one area that has epidote. Another pit has smoky quartz and amethyst, and there is an area that contains beryl. You can dig in the pit where the veins are exposed or go through the tailing piles left from the excavator.

The fee is \$25.00 per person with an option to camp out at the facility on Friday night with an additional fee of \$25.00.

Registration and payment MUST be made in advance, see below.

Registration and payment must be made in advance through PayPal using Jason Ashley's PayPal email account: jasona@wctel.net or call him at 864-378-1908 to send a check. Details for registering:

- 1. Sign up through PayPal as "friends and family" at jasona@wctel.net.
- 2. You must list the date of the dig you are attending in PayPal notes.
- 3. You must put the names of all attendees you are paying for in PayPal notes.
- 4. Once you have signed up correctly digs will be rain or shine and there are no refunds nor are funds transferable to another dig date.

A **Blue Valley side trip** was attempted by Marsha, Virginia and Sean. We were in search of an old Amethyst mine in that area. I had been there before but the creek crossing proved to be over grown and the water was way to deep to cross, this time of year.

We were unable to find it but did run across Picklesimmers Rock House Cave and we gave this area a thumbs up as to short distance hike and beauty! This we found about 7 miles from Highlands off hwy 28.

This is an excellent time to take advantage of our National Forest by hiking, viewing waterfalls and maybe a little rocking hunting? As our current health warnings discourage crowed areas, we are all lucky enough to live within the resources of Western North Carolina.

NOTES FROM THE CLASSROOM

Diane Mason Photographs by George Fritz

Wire I Class: The spring class of Wire I is underway at the Museum with three classes completed. A couple of students dropped out and we ended up with only three ambitious students in this class. Cindy Pease, Mike Hartman, and Bushy Hartman are making extremely good progress and doing a wonderful job. They should be prepared to do some demonstrations at the next Gemboree.



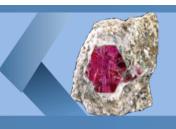


Previous Finds at Johnson Creek Farm Photographs by Stacy Walbridge



Cindy Pease focused on her wire bundle

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Mike Hartman tightening his wrap



Bushy Hartman evaluating her wire bundle

Wire II Class: Melissa Barfield will be exhibiting her examples of WIRE II to the next general meeting. She and several others completed this class a few weeks ago. I am very proud of all of the students that have participated in wire classes through the FGMS in the past 5 years. Just goes to show how much interest this group has. Wonderful job all of you!!!!!!

John Hayes recently provided instruction on the special techniques needed to polish sapphires. Gary Galbrecht brought several examples to show the great results of that instruction.



Polished Sapphires by Gary Galbrecht Photograph by George Fritz

JEWELRY BENCH TIPS IDENTIFYING UNMARKED SOLDERS

There are plenty of ways to mark your sheet or wire solders, but suppose you forgot to mark them and have a couple that you can't identify. The answer is to compare the melting temperature of the unknowns with that of a known solder. What I do is take a thick scrap of copper or nickel and arrange several solders on it. Ideally, I would have a sample of easy, medium and hard known solders surrounding the unknown solder. Then I heat the plate from the bottom and watch the order in which the solders melt.



CHROME DIOPSIDE

by Susan Fritz

Russian chrome diopside first entered the market in the late 80s. After the collapse of the USSR the gemstone began to circulate more heavily and quickly became a stone considered a suitable substitute for pricier green gems such as emerald, green tourmaline and tsavorite at a fraction of the cost.

The majority of chrome diopside is mined in one location: Ingali, which is located in Eastern Siberia. near kimberlite shafts. It basic forms in and ultrabasic igneous and metamorphic rocks. Due to the unforgiving climate of this region's sub-zero

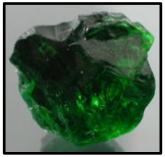
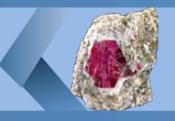
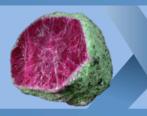


Photo Courtesy of minedirect.com

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temperatures, mining occurs only three months of the year, July through August, when weather is mild enough for diggers to excavate.

Chrome diopside is a beautiful green stone. It is highly refractive (nearly twice the refraction index compared to emerald). It can be found all over the planet but the rare, top-gem quality chrome diopside is found in Siberia. Russian chrome diopside receives its color from the presence of chromium. So it gets its name from the mineral chromium and the word diopside is of Greek derivation and translates to "two faces." This refers to the two planes of cleavage.

Due to the two planes of cleavage and the need for high quality gems, only about 10% of the rough material can be transformed into a polished material. It is best to cut the diopside in shapes with rounded corners such as oval or round. As a result of the cleavage there is approximately 90% loss of rough. 10 carats polished = 100 carats of rough. It ranks 5.5 to 6.0 on the Mohs scale of hardness. Therefore, I would consider a chrome diopside ring to be a "hands at leisure" stone.

The gems are intensely saturated with a fresh, grass green color and, as explained, not often seen in extremely large sizes. Big stones will have a very dark green to black look about them making them undesirable. Therefore, it's rare to find gem quality examples over two carats in size. No treatment is given to chrome diopside; no heat, irradiation or oiling (emerald, on the other hand, often undergoes treatment to reduce inclusions or improve color).

Unfortunately, gem quality chrome diopside is becoming more difficult to find throughout the United States as Chinese buyers have made deals with mine owners to buy out every bit of quality rough from the mines.



Photo Courtesy of GoldAquamarine at Etsy.com

Because chrome diopside is untreated, the gorgeous green color can rival emeralds, and the relatively low cost, it is one of my favorite gemstones.

SAPPHIRE SORTING FUNDRAISER

by Lee Perry Bender Photographs by John Hayes

John Hayes came up with a fundraising idea that involved members sorting through selections of small local rough from the Ellijay region to separate out sapphires, which could then be sold in small vials by the gift shop. The challenge turned out not to be as simple as it seemed. Nine members each donated \$10 for the opportunity of sorting through one small container of gems for 30 minutes.



Member on the hunt for Sapphires

The members that found the most sapphires was offered the \$10 back. All members got to keep 50 of the sapphires they found, and the balance are to be sold by the gift shop. The catch here is that most of us had no real idea what we were doing in the beginning – and no UV lights were allowed during the initial sorting. So we ate pizza, then sorted stones, while we joked, laughed, listened to stories – in general had a good old time.

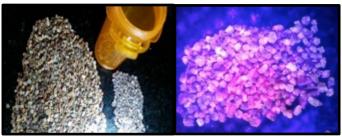
At the end of the 30 minutes we checked our findings with the UV lights! Bushy Hartman won the competition by finding 313 sapphires. Lee, by contrast, thought she found 200, but a check with a UV light revealed that only 66 were actual sapphires – she'll do better next time. Bushy gave back the \$10 she won, so the total funds raised were \$90, plus the potential deriving from sapphires sold.

This all took place on Thursday, March 5, participating members were Bushy and Mike Hartman, Nancy McShane, Tom Parker, Chuck Coulson, Ron Bischoff, Marsha Harmon, Wendy

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Frank, and Lee Perry Bender. John Hayes, along with Al Pribble, supervised and kept us entertained. More information will be given at the next general meeting. John says he may hold another Sapphire Sorting Fundraiser in the summer, so other members can share in the fun, and in this learning experience.



Sapphires in natural light (I) and under UV Long Wave (r)



SPEAKING OF FUNDRAISERS TRY AMAZON SMILE



During last month's meeting Mike Hartman mentioned that if you buy items on Amazon 0.5% of the purchase price will be donated to FGMS. But you need to shop at the (https://smile.amazon.com) website and select Gem & Mineral Society of Franklin N C as the charity organization. Detailed instructions and general Amazon Smile information are included as a separate file in the newsletter email.

> MOTHERS DAY GEMBOREE May 8, 9, & 10, 2020

Unfortunately our Mother's Day Gemboree has been cancelled.

2020 Meeting/Event Schedule

March 26th - Cancelled

April 30th - Collecting in the Sonoran Desert -Stacy Walbridge

May 28th – Opals – Tom Parker

June 25th – Brazil Minerals – Arlon Eldridge

July 24th to 26th - Faceters Frolic

July 30th – Show & Tell / Ice Cream Social

August 27th - Elections & talk by Kim Cochran

September 24th - Installation Banquet

October 17th - PumpkinFest

October 29th - Regular Meeting

November 19th - Regular Meeting
November 28th - Winter Wonderland
December 5th - Winter Wonderland

December 19th - End of Year Banquet

April Newsletter Deadline is Friday, April 13, 2020



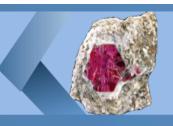
UPCOMING SHOWS

Due to the uncertainty of scheduling reaction caused by to coronavirus, no upcoming shows are posted for April. Hopefully, a month from now we will have new schedule dates for area shows.

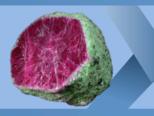
NOTES ABOUT WILLIAM HOLLAND

As of now, William Holland will be opening on April 12th, which is their planned 2020 schedule. Please keep in mind this is a very fluid situation and it is changing by the hour. To help keep calls to a minimum, William Holland will frequently be posting updates to their new Facebook page:

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(https://www.facebook.com/William-Holland-School-of-Lapidary-Arts-100635884893809) and website (https://lapidaryschool.org/main.aspx). They also request that you email questions to (info@lapidaryschool.org) instead of calling, as they are on a very tight staff at this time.

Having said that and looking ahead with fingers crossed our Southeast Federation holds workshop weeks at William Holland and Wildacres for everything from beading classes to lapidary classes to silver classes. Come to one of the Federation Weeks to enjoy the mountains, learn from knowledgeable teachers and make new friends!

William Holland Federation Week 2020 June 7 - 12, 2020 Classes

Cabochons with Paul Roberts
Casting with Bill Harr
Faceting with Linda Searcy
Flame Painting with Janet Pace
Fly Tying with Jeff Heer
Intarsia with Bill Boggs
Loop-in-Loop with Chuck Bruce
Seed Beading with Jerri Heer
Silver I with Pattie Appleby
Silver II with Dale Koebnick
Silver II - Hydraulic Press with Vickie Prilliman
Silver-Wear I and II with Jan and Keith Stephens
Wire II with Gene Sheridan

For more information:

https://www.sfmsworkshops.org/william-holland-classes

ENORMOUS CRYSTAL GEODE DISCOVERED IN SPAIN

Contributed by Gary Galbrecht

http://www.geologyin.com/2016/10/enormous-crystal-geodediscovered-in.html

A gigantic cave of crystals has been discovered in an old silver mine in Spain. It occupies a space of 10.7 m³ (8 m long by 1.8 m wide by a 1.7 m average high) and is located at a depth of 50 m in the Pilar de Jaravía lead mine, in the Sierra del Aguilón, in the municipality of Pulpí, coinciding

with the sea level, 3 km from the coast.

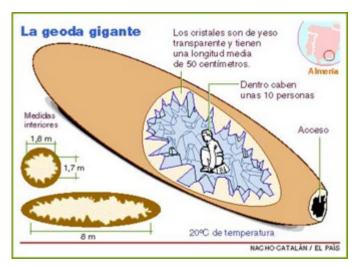


Credit: Javier Trueba/MSF/Science Source

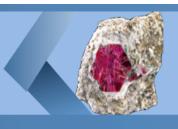
The geode, which is eight metres (26ft) long and crammed full of gypsum prisms, has been put under police guard to prevent souvenir hunters from raiding the extraordinary natural phenomenon.

He said that up to 10 people could sit inside the geode - an object normally small enough to hold in your hands.

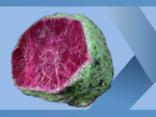
"Bending your body between the huge crystals is an incredible sensation," he said. "When I was young I dreamt of flying, but never to go into a geode internally covered with transparent crystals."



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Rumors of the existence of a giant gypsum geode had been circulating among mineral collectors since December.

But it was only on May that Javier Garcia-Guinea, from the Spanish Council for Scientific Research (CSIC) in Madrid, finally managed to track down the cave.

"The crystals are absolutely transparent and perfect," he said. The geologist has searched the international literature and can find no other object to compare in size.

The geode - essentially a rock cavity which has become lined with crystalline deposits - is eight meters in length, 1.8 metres wide and 1.7 metres high (26 feet by six by six).

The crystals of gypsum - hydrous calcium sulphate - are about half a metre in length. The giant geode may have formed at the same time as a geological event called the Messinian salinity crisis.



Credit: Javier Trueba/MSF/Science Source

At this time, about six million years ago, the Mediterranean Sea evaporated, depositing thick layers of salts. The same, salt-saturated fluids could have filled up the Spanish geode, which lies near the coast.

ETC. Frank Mayo, 1979

Fact or Fiction: It was reported that Georgia miners. who had heard that diamond was the hardest substance known and could not be broken, "tested" one large diamond on a blacksmith's anvil by hitting it a mighty blow with a sledge hammer. The great Roman naturalist, Pliny the Elder, is responsible for this wonderful notion. Among the 37 volumes of natural history which he wrote, one was devoted to gemstones; it contained this "test" for diamond. Pliny died in 79 A.D in the destruction of Pompeii by the eruption of Vesuvius, but this nonsense about diamonds lived on and has, no doubt, been responsible for the smashing of many fine stones!

CRATER LAKE

In the state of Oregon is Crater Lake, where once stood a 12,000 foot volcano called Mount Mazama. About 7,5000 years ago a violent eruption blew 17 cubic miles of its summit away with pumice and ash reaching 30 miles high. The remaining base of the volcano collapsed into its magma reservoir underneath, forming a caldera or hole five mile wide. Today it contains a 2,000 foot deep lake and a small volcano called Wizard Island

UBEHEBE

There are almost a dozen dormant volcano craters in Death Valley. The most prominent is Ubehebe, an explosion crater that may have last erupted as early as 300 years ago. It measures half a mile across the top and is 800 feet deep. A short hike south from the high point on Uhehebe's rim leads to a nearby perfect cinder cone located inside a worn down crater.

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Word Search Puzzle Kathi Walbridge

We taken a list of some of the recent field trip locations and scrambled them into this diamond shape. Find the 18 locations, which may be spelled in any direction. Answer in next month's newsletter

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MGW
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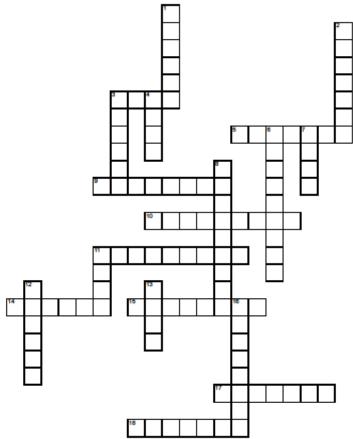
WORD LIST			
1	AMOS CUNNINGHAM FARM	10	DUCKTOWN MUSEUM
2	BLACK MOUNTAIN STATE PARK	11	FGMS MINERAL CLAIM
3	BRASSTOWN	12	GRAVES MOUNTAIN
4	BROOKWOOD	13	JOHNSON CREEK FARM
5	CHUNKY GAL	14	LAKE DOUGLAS
6	CLARKSVILLE	15	PATTY QUARRY
7	CRABTREE MINE	16	RAY MINE
8	CULLASAJA RIVER	17	SPRUCE PINE
9	DIAMOND HILL	18	SUMMERVILLE

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Crossword Puzzle Kathi Walbridge

To help keep you entertained we've come up with a mineral crossword puzzle. See how well you can do without using reference material. Answers will be provided in next month's newsletter.



Across

- ${\bf 3}$ The word "igneous" comes from the Latin word for
- **5** A common carbonate mineral, often a replacement mineral in fossils
- **9** Calcium fluoride
- **10** A naturally magnetic rock
- **11** A bright green copper carbonate
- **14** The main source of lead
- 15 The property of a mineral that describes its ability to resist being scratched
- 17 The hardest mineral on Mohs' hardness scale North Carolina's state stone

- 1 Sometimes called Fool's Gold
- **2** A bright blue copper carbonate
- **3** The remains (or impressions) of a plant or animal that existed in a past geologic age that has been preserved in the earth's crust
- **4** The birthstone for July
- **6** Sandstone, shale, and _____ are examples of sedimentary rocks.
- **7** The mineral used to make steel
- **8** Strontium sulfate, its name means "celestial"
- **11** A silicate mineral known for its perfect cleavage in thin layers
- 12 Rock salt
- **13** The softest mineral on Mohs' hardness scale
- **16** The birthstone for September

March 2020



The Next Meeting (Hopefully)

The next meeting will be held at 6:30 PM on Thursday, April 30th, 2020 at the First Christian Church, 156 Belleview Park Rd, Franklin, NC 28734.

Collecting in the Sonoran Desert by Stacy Walbridge

FGMS Board meets the Tuesday before the regular meeting at 4:00 pm at the Museum

