

CRACK 'N CAB



Gem & Mineral Society of Syracuse, PO Box 2801, Syracuse, NY
web: <https://www.gmsss.club> (updated!) Volume 53 Issue 9, **Sept. 2023**
209 Oswego St (Ponderosa Plaza), Unit 15, Liverpool, NY



Focus on Fluorite

Monday, Sept. 18 Meeting Program: Mineral of the Month

Officers Election Information- Pg 2
Knowledge Corner, Silent Auction
See September News Article on Page 4

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Gem Cutting Lab News: 8 New Grads! – see Pages 5 & 6

Field Trip News: Talcville, NY – Page 8 & 9

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Judy's Journal: Picnic Photo Review – Pages 12 - 15



Photo by Judy Cook



Upcoming Fall Shows – Page 11

President's Message

John Sweeney



**Not Available
At
Press time.**

Elected Officers Nominations

As determined by the Executive Board at the September 5, 2023 Board meeting, **our annual election will be held during the October regular meeting** with the newly elected officers sworn in and assuming their positions at that meeting.

Per the September 5th Executive Board meeting, **the slate of individuals running for GMSS elected office for 2023-2024 reads:**

President – John Sweeney

Vice President – Cathy Patterson

Secretary - Skylar Haas

Treasurer - Linda Clark Sweeney

Sergeant at Arms - Matt Klinger

Webmaster – Amanda Lytle

Editor – Larry Petry

Additional officer nominations may be made at the September meeting before the election takes place at the October 16th regular meeting.

Letter to the Editor

July 19, 2023

To the Members, Committee Members and Officers of the Gem and Mineral Society of Syracuse

Thank you. Wow, what a fantastic 2023 GemWorld Show! Thank you for all the wonder-filled show experience at your 2023 56th Annual GemWorld Show – New York Rocks, wow, what a show! There were smiling faces on all the volunteers. Everyone was helpful in answering questions, offering directions on where to find things, and all the while being very patient. It was so very welcoming a feeling.

The demonstrations, lectures, club table, exhibits, metaphysical area, wholesale area, and the youth area were all supported and staffed with people going out of their way in being dedicated, excited with what they were doing, helpful and informative. The youth area seemed especially staffed with over the top in excitement and dedicated people – it was wonderful to see all those smiles on the volunteers and on the kids participating in the activities. The excitement and creativity in the youth area flowed freely. All the people and activities together helped with creating the wonderful GemWorld experience.

Personally it was especially enjoyable to see so much activity in the youth area – an excellent sign for the future of a club. Well done educational exhibits highlighted some of the many and varied interests and artistry of the GMSS members. Exhibits simply, yet very effectively, educated patrons about Syracuse's salt history, black and white minerals, scouting and minerals, club member lapidary and jewelry skills, the vast fossil history of New York, New York minerals, and so much more were shining examples of what club members do, collect, share for interests, and teach one another about the full width and breadth of the rock, mineral, fossil, lapidary and jewelry hobby. Thank you for the many exhibits on display.

There are also thanks to be offered for having representatives present to speak about the Paleontological Research Institution's Museum of the Earth's many educational experiences and offerings. And then there was the pleasure of meeting and having the opportunity to speak with the "Rock Doc". Wow, what a show. There simply was not enough time to speak with everyone, see everything, or experience every GemWorld offering. It was an amazing show, thank you.

(Continued on Page 3)

May I also offer a hearty thank you to the members of the Gem and Mineral Society of Syracuse for hosting the Eastern Federation of Mineralogical and Lapidary Society's 2023 Annual Convention. The hosting of an EFMLS Annual Convention is a good measure of effort in arranging host hotel, meeting rooms, banquet planning, field trips, electronic arrangements for remote participation and all the myriad of supporting activity such as name badges, and promotion, is greatly appreciated. The "Welcome packet" and absolutely incredible table favors were amazing. And then there was the work of collecting, cutting, designing and creating the gem tree artistry in making those favors! In a word, they were incredible, amazing, beautiful, creative, and wonderful! Sorry, just one word was not sufficient.

Again, to the members, committees, volunteers and officers of the Gem and Mineral Society of Syracuse, thank you for making all the 2023 GemWorld experiences and times there memorable, enjoyable, filled with smiling people, and one filled with making new friends and renewing of old friendships.

Respectfully,
Ellery Borow
Immediate Past President of the Eastern Federation

Executive Board Meeting 9/5/2023 Minutes

President:

Election: Larry will post Officers in the September and October Newsletters, and **voting will take place at the October General meeting.**

Budget Committee meeting to discuss budget, rent increase options and purchase of Diamond Dan Publications. Meeting set for Wednesday, 9/27/23.

Committee to build fluorescent display case, and another to sort new collection that was donated from the estate of a local rockhound. John will address in his column in the newsletter.

Secretary Report:

Accept Minutes (July 2023): Motion to accept by Cathy P. second Dick L / accepted unanimously.

Treasurer Report:

Treasurer's report - report will be completed for the Budget Meeting.

Rent Increase - rent is increasing by \$125. Per year each year X 3 years. John will discuss this with the landlord to see if we can have it reduced.

Both Jr. Rockhounds and the Library have yearly budgets that have not been used.

Tee shirts, hoodies, etc. for order: Linda Clark will have flyers/order forms at the next 2 meetings for members to order.

We discussed rolling over our current CD and adding to it for the increased interest. Motion by Cathy / second Cheryl / approved unanimously.

VP report: Meetings and field trips

September: Mineral of Month opener, 15-minute talk on Fluorites. Recap of New York Rocks, Welcome new members, Silent Auction

October: Fluorescent minerals, Dino Zack, Silent Auction, Election and Assigning Committees

November: Club Auction

Club has Museum of the Earth (Trumansburg) Tickets.

60 members attended the club picnic in August. Park rental is being raised next year.

Web Mistress: Thank You for address inclusion.

New web address is: gmss.club
Old address will be operational until January.

Facebook:

Hafner's Fall Fest is October 21 and 22. Space available for club members to seller display. Must have business certificate to sell.

Membership:

Raise Dues Jan 1, 2024? Will discuss at budget meeting.

Junior Rockhounds:

Rick will try schools and libraries to recruit interested kids.

Hospitality:

Cathy will ask someone to take charge of hospitality for the September meeting and we will ask for a volunteer going forward.

Lapidary committee:

Machine has been ordered.

Classes start up September 16th.

Show:

Need members to sell at Hafner's Fall Fest
Will discuss raising table / door prices for future shows at the budget meeting.

Editor: We need member articles.

Sergeant at Arms: Have new computer to start collection summary and use at show.

Respectfully Submitted,
Teresa Arnold, Secretary

Welcome New Members

John Darling
 Joseph Domanski
 Tyler Hewlett
 Jeffery & Sharon Huord
 Audrey Levinson
 Kris Rounds
 Maddy West

Membership Renewal

It's that time of year again!

Single adult membership - \$10.00
 Junior membership - \$5.00
 Family membership - \$15.00
 Life membership - \$5.00

Renewals can be made
 through the mail and at
 the September meeting.

September Meeting Program

Cathy Patterson, Vice President

Monday, September 19, 2023, 6:45 PM will be the Youth Group meeting. Parents are welcome! It might be helpful to contact me in advance if you plan to bring the kids.

Silent Auction will be starting 6:45- 7:15 PM. If you have a couple items you'd like to include in the silent auction, bring them and fill out the short form. Folks can make written bids on the form. When the bidding is ended, winning bidders pay the auction seller. Easy, peasy, fun! You might go home a few dollars richer! Stone material, books, jewelry, polishing slabs, etc. are all fair game. Bring small bill cash to make it easy for transactions.

So much to Catch Up On!!

There will be a business meeting, meet-and-greet time, update on field trips, notice of lapidary and wire wrap classes, presenting the slate of officers for the new fiscal year, and club news to share. A LOT has happened since our last meeting! We may have many new members attending so let's show them good old rockhound hospitality and introduce ourselves to make them feel welcome. *Wear your club name badge!*

Dave Millis and Cathy Patterson will give a short talk about the **MINERAL OF THE MONTH – Fluorite**. You'll learn a bit about this colorful mineral, how it is used, what makes it collectible, and even some metaphysical properties of the mineral. Door prizes, this month, will be a few of Loren Patterson's fluorite collection that was on exhibit at the July show. Go home learning something different, just like the kids at school do!

Field Trippers who have collected minerals/fossils over the summer **PLEASE bring a few finds to show off and talk about.** YOU will be the stars of the program. Show us what you found and where you found it. Tell us about the collecting conditions. Impress us with your terrific finds! Rockhounding is FUN! Let's share it! **Please contact me if you are willing to talk about your finds. Text/call me 315-480-8907.**

Refreshments will be provided. A sign-up sheet will be posted for everyone to pick a month to bring a treat. We'd like at least 3 people to be refreshment bringers (beverage, sweet treat, savory snack). A Hospitality Chairman will be appointed to coordinate this. If this is your interest, please let us know. Food matters!

We'll conclude the evening's events around 9:00.

A Sparkling Summer in the Gem Cutting Lab: Polishing Our Way to Excellence

By Bill Vergé

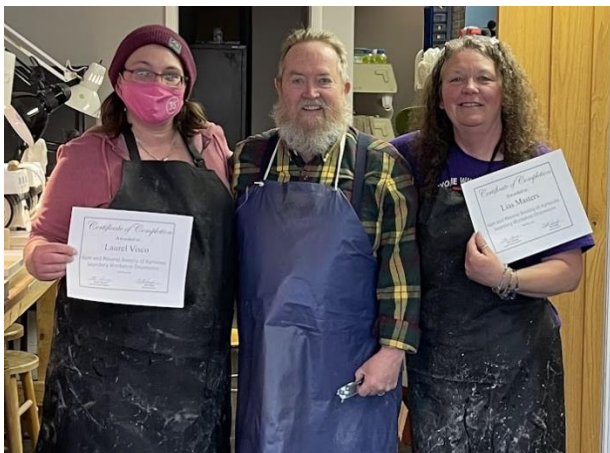
Summer at the GMSS Gem Cutting Lab has been nothing short of spectacular. From students' skill development to the arrival of new equipment and generous donations, it's been a season filled with excitement and progress.

Cutting-Edge Equipment and Donations: One of the highlights of our summer was the acquisition of state-of-the-art gem cutting equipment. Thanks to the generosity of our supporters, we welcomed a suite of new machines that have transformed the way we work. These additions, including a precision Ultra Tec faceting machine donated by Loren and Cathy Patterson, have allowed our members to refine their craft like never before.

A Growing Community: Our Gem Cutting Lab has seen a surge in students over the summer, with enthusiastic students and community members joining our ranks. Our new students bring fresh perspectives and energy, enhancing the collaborative spirit that makes our lab so special.

Summer Workshops and Projects: Throughout the summer, our members participated in a series of engaging classes and projects. These hands-on experiences allowed them to hone their gem cutting skills and explore new facets of the craft. Whether it was mastering the art of cabochon cutting or experimenting with unique gemstone shapes, our members embraced the challenges with passion and dedication. We had many classes this summer and 8 people received certificates of completion. Here's a brief recognition of each student:

1. Loral Visco: Loral's dedication and hard work have paid off, earning her a well-deserved certificate of completion. Her commitment to mastering the art of gem cutting is truly commendable.



Loral Visco, Bill Vergé, Lisa Masters

2. Lisa Masters: Lisa's precision and attention to detail have shone brightly in the lab. Her certificate of completion is a testament to her talent and commitment to the craft.

3. Sidney Cohen: Sidney's enthusiasm for gem cutting has been a source of inspiration to us all. Her certificate recognizes her skill and passion for this intricate art.



Sidney Cohen, Steve Shorey, Rob Meixmer

4. Rob Meixmer: Rob's perseverance and dedication have made him a standout member of our lab. His certificate of completion is a well-earned acknowledgment of his accomplishments.

5. Audry Levinson: Audry's creativity and willingness to explore new gem cutting techniques have set her apart. Her certificate reflects her commitment to continuous learning and improvement.



Audry Levinson, Bill Vergé, Doria McIntosh

6. Doria McIntosh: Doria's contributions to the Gem Cutting Lab have been invaluable. Her certificate of completion is a testament to her hard work and the positive impact she has had on our community.

7. Celestine Drake: Celestine's passion for gem cutting has been a driving force in our lab's success. Her certificate recognizes her dedication to the craft and her willingness to share her knowledge with others.



Celestine Drake, Steve Shorey, Sam Fiore

8. Sam Fiore: Sam's commitment to excellence in gem cutting is evident in his work. His certificate of completion is a well-deserved recognition of his skill and dedication to the art.

Congratulations to all eight students for their outstanding achievements at the Gem Cutting Lab. Your certificates of completion are a symbol of your hard work, dedication, and the bright future ahead in the world of gem cutting and lapidary arts. We look forward to witnessing your continued growth and success in the field.

Generous Donation Enhances Gem Cutting Lab's Capabilities & Upcoming Lapidary Class

By Bill Vergé

We are happy to announce a significant boost to our Gem Cutting Lab's resources, thanks to the generous donation of equipment by Lynn Pitcher of Syracuse. Lynn's contribution includes a skill tile saw, a high-tech 8" flat lap, a Chicago Electric stone tumbler, and an impressive 500 pounds of slabbing rocks. This donation not only enhances our capabilities but also represents a tremendous investment in our shared passion for gem cutting and lapidary arts.

New Equipment Details:

Skill Tile Saw: This precise cutting tool will allow our members to create intricate designs with ease and accuracy.

High-Tech 8" Flat Lap: The addition of this advanced flat lap machine ensures that our members can achieve the finest polish and perfect symmetry in their gemstone creations.



Chicago Electric Stone Tumbler: Tumbling is a basic step in the gem cutting process, and this tumbler will help both young and old rock collectors.

500 lbs Slabbing Rocks: Lynn's generous donation of slabbing rocks provides our students with a wide variety of materials to work with, allowing for endless creativity and experimentation.

The Gem and Mineral Society of Syracuse Gem Cutting Lab extends its deepest gratitude to Lynn Pitcher for her remarkable donation, which will undoubtedly enhance the experiences and achievements of our members. We eagerly anticipate the start of our fall lapidary class and look forward to welcoming both newcomers and seasoned enthusiasts into our vibrant gem cutting community.

Fall Lapidary Class

We are excited to announce the commencement of **our first lapidary class for the fall season, starting on September 16, 2023, at 10:00 AM.**

This class promises to be an excellent opportunity for both beginners and experienced lapidary enthusiasts to learn and refine their skills in a supportive and collaborative environment.

Contact Information: For those interested in joining our fall lapidary class or learning more about our Gem Cutting Lab, please contact Bill Verge at 617-872-4525 or email b.verge@comcast.net. Bill will be happy to provide you with all the necessary details and assist with registration.

**Geo Lexis (Puzzle)
By Anne Fitzgerald**

“Learning about Luminescence”

Science and math were never my favorite subjects when I was younger. I was, however, fascinated the first time my ninth-grade earth science teacher explained carbon-14 dating. It was one of the first times I understood how science and math worked together and how these things helped us uncover some profound truths about the world. Counting tree rings was even better (the math was much simpler, and even I could determine the date of a tree without the help of a scientist, or so I thought.) Many years after ninth grade, I learned some of the limitations

of carbon-14 dating. There was the fact that you have to have carbon to do the dating. The other important fact was that carbon-14 dating only goes back 50,000 years or so. And in doing some fact-checking, now I find that counting tree rings also has its limitations. Luckily, we have other ways to date things like potassium-argon and uranium-lead dating. Someone even added up some more numbers to come up with carbon-41 dating.

One type of dating I had never heard of (until a few weeks ago) is "luminescence dating."

Imagine an object's last day in the sunlight before it's buried. Another day, thousands of years later, that object is unearthed. By measuring the stored sunlight, scientists can determine the age. Scientists can tell the last time an object was exposed to sunlight by looking at the potassium feldspar or quartz grains. They can date objects back to a few hundred years or a few thousand by measuring the amount of stored light in the grains compared to the new reactions of the new light to hit the surface. While this technique also has its limitations, the accuracy rate is still considered acceptable enough to make luminescence dating an important tool for archaeologists and paleontologists.

Here are some word puzzles for your brilliant mind. The answers will come to light on Page 11 of this newsletter.

astro luminescence

lunar luminescence

molten material lighting device

common canine name luminescence

t
h
g
i
l

Check out our brand-new web address:

WWW.GMSS.CLUB



Easy to Remember!



Easy to Tell Your Friends!

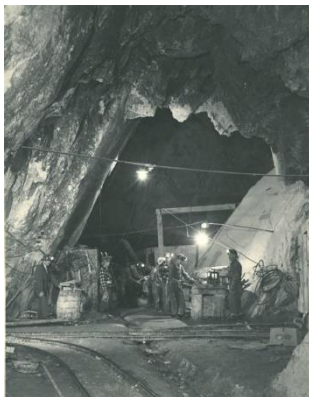
(GMSS = **Gem & Mineral Society of Syracuse**)

About Talcville, NY (St. Lawrence County)

By David J. Schryver Originally posted March 2012

The hamlet of Talcville has been in existence since around 1830. In the 1940s and '50s, the area was one of the leading talc mining regions in the world. It got its name from the mining but wasn't always known as Talcville.

Originally known as Freemansburgh, it got its start from the prospects of iron mining in the area. In 1830, Captain Alfred Freeman believed there was iron ore in the rocks of the region. Iron works were already located in nearby Fowler and Fullerville. His initial efforts were not successful. He built an iron furnace there in 1843 but the quality of the iron produced, known as bog iron, was not up to standards. After about 20 years, the efforts were abandoned. The furnace was destroyed by fire in 1847.



Workers inside the Number 2 1/2 talc mine in Talcville. (northcountryartwork.org)



The undated photo at the right shows the old Number 3 mine. Operated by International Pulp, which later became International Talc and then Gouverneur Talc, this was located off of Mine Road. This road, which is no longer maintained, public, or for that matter very passable, exits the Talcville Road across from a cluster of three houses just downstream from Newton Hill.

What's In a Name?

August 15th Talcville Field Trip

Dave Millis

The trip was a major success. There was a lot more fluorescent material than I imagined. The ruby color was easy to find and in the past, I called it tirodite. Tirodite has impurities similar to other tremolites but not as much as 5 percent iron at which point its name changes to anthophyllite. Turns out it's more complex than that. According to Joey, it was first changed to cummingtonite and then changed to a name he couldn't say.

So, being a dinosaur, I will continue to call it tirodite when I mean to say what Joey couldn't say.

Anyway, there were 7 of us on the field trip which started at DD (Dunkin') in Gouverneur. Bill Deloraine stopped to visit us, and we had a short meeting in DD. Future plans include the Bower Powers field trip on the 26th leaving at 9am from the canton show. And a possible Benson Mine trip after Labor Day.

We drove to Talcville and parked within 50 feet of the dig. Four of us attempted to climb the hill with limited success. Tim and I only got halfway before finding we didn't have to go any farther! The others stayed at the bottom and found lot of material too, but it tended to be massive rock with talc fixed in. This material seemed to be orange rather than ruby red.

New mineral name is clino-suenoite

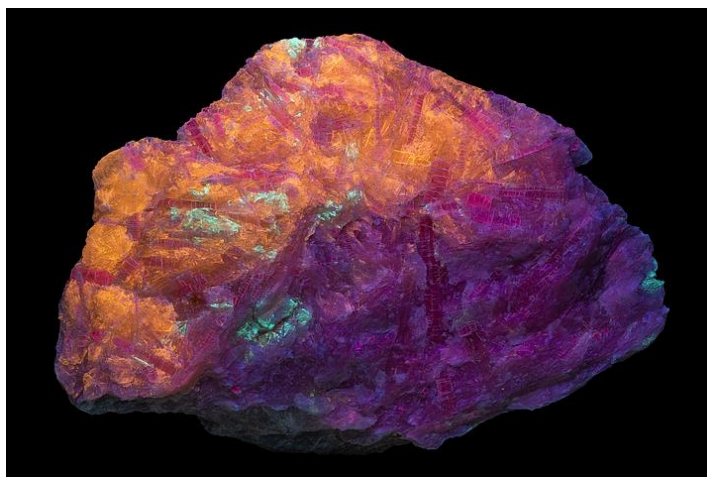
Not sure if I believe it's the right name. I'm sticking to tirodite until someone convinces me otherwise. There is another mineral with a slightly more complex spelling, but it contains iron. In general, iron minerals do not fluoresce.



[Clino-suenoite](#)
Franklin Mine,
Franklin, Sussex
County, New
Jersey, USA

Clino-Suenoite.
It's no wonder
Joey couldn't
say it. I can

spell it, but I can't say it either. It is listed as coming from Talcville and was identified in 2017. I like tirodite better.



[Anthophyllite](#), International Talc Company Mine, Talcville, St. Lawrence Co., New York, USA

Anthophyllite is tremolite with at least 5% iron content. Tirodite is between them and fluoresces

ruby red. At least, that's what I thought!!!! It's a magnesium-iron magnesium amphibole closely related to anthophyllite.

Tiroadite



Tiroadite Gouverneur New York flickr.com

The name tiroadite was discontinued in 1997. No reason given. After various other possible names, those in charge of naming minerals have settled on clino-suenoite. If you are my age, you can use tiroadite and I'll know what you mean!!!! Labels saying tiroadite have historical value!

By now you know that **the September program is partly fluorite**, about 25 minutes and Cathy will do the rest. It occurs to me that there is nothing for the knowledge corner. So! I will present a talk about a fluorescent rock from Talcville, NY that will be highly enlightening. The mineral **tiroadite** is its old name. **There will be free samples and larger ones for sale in my car.** The main reason for this talk is it has a rare ruby red color in 365nm UV light. I may have some extra lights, too. So, bring your long wave UV light to the 7pm, 15-minute talk, before the regular meeting at 7:30.

Diamond Mountain Mining Dig

By Shannon Phillips

Diamond Mountain is the Herkimer collecting site where you can find the most amazing crystals. You might not find them, but the possibility exists, which makes it a very exciting hunting ground. We discovered Diamond Mountain in 2020, when there were limited options for Herkimer Diamond mining. Unlike other public digging sites, skeletal, scepters, complex combinations, and black Herks are the norm. I had always dreamed of finding a skeletal at Hickory Hill, but we only got to go there a few times before it closed. I never found one.

We first visited Diamond Mountain in June of 2020. The site had only been open for a few weeks for public collecting and group size was limited to 10, which was really nice. After receiving basic instructions from the owner and host, Larry, we hiked up a steep hill to the exposed pocket layer. Larry had advised us to poke along the wall with a screwdriver to look for sand seams that might contain pockets. Within an hour of poking around, Michael discovered a small opening that expanded into a pocket containing a large skeletal and many smaller crystals. My dream came true, and I joked that we could go home because I had my prize. We stayed, and searching the ground proved very lucky for me when I found a beautiful complex crystal in the dirt. We were hooked!

The 187-acre property has evolved over the past three years. The area of our first dig is now part of the commercial mine, and new ground was broken this spring for public mining. This area, called Crystal Ridge, is much more accessible than the original site - no more walking straight up hill! Our first visit on the opening weekend in May was not very successful. We didn't realize that the site was brand new, and we were not prepared with the right tools to actually break ground. Our return in July was more productive. We stayed for the weekend in the awesome Diamond Suite, an Airbnb that is part of the original house on the property. This time, my goal was to find a scepter, an unusual formation that Diamond Mountain is known for.



The scepters are formed of a hydrocarbon-included black crystal with a secondary growth of clear crystal, usually at one end. Most often, they are attached to the wall of the pocket they formed in, creating one broken end. This makes them no less exceptional geologically, but I wanted one that was

terminated at both ends. I can't say it was really my goal to find one, because the chances of doing so are so incredibly low. While I had voiced my preference, I didn't really think much more about it.



Waking up on site and making our way to the mine was a nice change from driving two hours very early in the morning. The Ridge is a forested digging area where miners with hand tools have exposed a generous mineral bearing wall. While breaking dolomite is never easy, much of the rock is eroded, making it less difficult to break ledge. In order to access the ledge,

we had chosen to start working on, Michael began moving dirt. We pulled out a few fractured crystals and then he pulled out a larger one that appeared intact. We cleaned it up as best we could and found that it was a beautiful crystal with complex growth.

I put it in my jar and kept digging. A little later in the morning, Deena, the very hands-on director of marketing and programming for Diamond Mountain, Ltd., came by and we shared our find with her. After examining the crystal



briefly, she excitedly pointed out that the central crystal was, in fact, a doubly-terminated black stem scepter!

While nothing else we found that day matched the first find, we did open a small pocket

that held a few interesting crystals. On the following day, because I was tired from breaking rock the day before, I spent hours sifting through piles of unscreened dirt left by diggers and I found scores of small, perfect Herkimer diamonds.

No one can guarantee a successful search when rockhounding at any location, but Diamond Mountain certainly offers an exceptional opportunity to go home happy. Not only does the site contain extraordinary crystal formations, but also the hosts and staff are extremely generous with their expertise and knowledge. There is always a staff member on-site eager to ensure an amazing experience for all diggers.

The mine owner is very supportive of gem and mineral clubs. Diamond Mountain Mining, Ltd. is offering free club digs for up to 20 club members all season. **The Gem and Mineral Society of Syracuse has a dig scheduled for Saturday, October 28.** Gates open at 8:30 am, and check-in begins at 8:45. We will begin promptly at 9:00 am; the dig day ends at 5:00 pm. **Space is very limited, so contact Cathy Patterson (Text/call her 315-480-8907) to sign up as soon as you know you will be able to attend.**

Upcoming Events

SEPT. 18 – GMSS meeting – 7:30 pm

Business meeting first, introductions of Board members, welcome new members. BRIEF SUMMARY of how the July SHOW WENT, thanks to many volunteers. Dave Millis talks on

Mineral of the Month: **Fluorites**. (IF YOU HAVE A LONG WAVE UV LIGHT, PLEASE BRING IT).

Also see the article on Page 4.

SEPT. 27 – GMSS Budget Committee

meeting – 7 pm at the Clubhouse. Will discuss budget, 3-yr projection, rent options, dues, Gemworld pricing. Anyone interested may attend.

OCT. 3 – GMSS Board meeting – 7 pm at the Clubhouse. All are invited.

OCT. 16 – GMSS meeting – 7:30 pm

Election of Officers. Our guest speaker, **Dino Zack, a geologist from Buffalo**, will be coming to speak about fluorescent and luminescent minerals.

OCT. 21 & 22 – Hafner's Fall Festival – see information below.

OCT. 28 – Diamond Mountain Mining Dig – see information in the article on the left.

NOV. 7 (maybe) – GMSS Board meeting – 7 pm at the Clubhouse. All are invited.

NOV. 20 – GMSS meeting – 7:30 pm

We'll have **our ever-popular club auction** of fossils, minerals, jewelry, tools, and rocky related items. This is an excellent opportunity to buy interesting hobby items at great prices! Do NOT miss this!

Hafner's Fall Festival

We've been invited back to Hafner's

Garden Center at

7265 Buckley Road on

October 21st and 22nd from 11 to 4.

If you have a tax ID number and would like to sell mineral and jewelry related items, please contact Cheryl at:

gmsrocks@gmail.com.

We also need folks who can identify minerals to help out.



Judy's Journal: Picnic Pictures
Camillus Erie Canal Park, Aug. 6
Photos by Judy Cook



Sims' Store Museum

Members brought cabs, jewelry, rocks and minerals to show and to sell.



And, of course, there was food!



Several tried their hand at geode cutting.



Copper Wire Ring Making Class

The class of six was led by Ronna, who has done very well on rings before and was able to make a ring with ring wire. My best student.

Other students are still in practice mode. Some better than others. I will keep offering these classes, so they can get more practice. There are actually two goals to the simplest copper ring class.

Using ring wire is one of the goals. The second goal is to wire-wrap cabochons in sterling silver. I shouldn't take short cuts. Ring wire is actually half-round wire. Eventually, students will need to buy their own sterling silver half-round wire and 18ga is probably best.

But, for now, we will continue to use copper or perhaps brass.

Geode Cutting

The geode cutting was started twice and only two people cut a geode the first time. After food it became more popular than ever before.

I had been trying to replace the bearings in the saw for several months without success. Saturday before the picnic I succeeded and learned that locktite will hold the bearing in place even if they are a bit undersized. It worked well at the picnic. I hope it lasts.

On my way home from the picnic, I got a call from a friend, who wishes to give his **vibrating flat lap** away. I don't need two. As a matter of fact, I don't need one. **There will be two in the auction as donations.**

Dave Millis



Lisa Miller was our boat guide and did a stupendous job on filling us in on the fascinating history of the canal and how this area was preserved and transformed into a park.



Amanda Lytle and Bill Verge brought bikes.



Picnic Lost & Found

Bob Livingston inadvertently ended up with somebody's shiny metal tongs from the picnic on Sunday. Will gladly bring and leave at meeting place. Lost is a pair of grey plastic eyeglasses that I think I lost at picnic spot.

And in Other News...

Toothpaste Ingredient Could Extend the Range of Electric Cars

By ARGONNE NATIONAL LABORATORY SEPTEMBER 4, 2023

Scientists at Argonne National Laboratory discovered a **fluoride** electrolyte that improves the performance of next-generation batteries beyond lithium-ion. This new electrolyte enhances energy density and prolongs battery lifespan, potentially revolutionizing the electric vehicle industry.

A new fluoride-containing electrolyte paves the way for high-performance, long-lasting batteries.

Many toothpastes contain sodium fluoride, a compound of **fluorine**, to defend teeth from decay. However, compounds containing **fluorine** have additional unexpected applications. Researchers from the [U.S. Department of Energy's Argonne National Laboratory](#) identified a fluoride electrolyte that could safeguard future batteries from performance decline.

“An exciting new generation of battery types for electric vehicles beyond lithium-ion is on the horizon,” said Zhengcheng (John) Zhang, a group leader in Argonne's Chemical Sciences and Engineering division.

The chemistries of non-lithium-ion batteries offer twice or more energy stored in a given volume or weight compared to lithium-ion. They could power cars for much longer distances and could even power long-haul trucks and aircraft one day. The expectation is that the widespread use of such batteries will help address the problem of climate change. The main problem is that their high energy density declines rapidly with repeated charge and discharge.

One of the main contenders has an anode (negative electrode) made of lithium metal in place of the graphite normally used in lithium-ion batteries. It is thus called a “lithium metal” battery. The cathode (positive electrode) is a metal oxide that contains nickel, manganese, and cobalt (NMC). While it can deliver more than double the energy density possible with a lithium-ion battery, that outstanding performance rapidly vanishes within less than a hundred charge-discharge cycles.

The team's solution involved changing the electrolyte, a liquid through which lithium ions move between cathode and anode to implement charge and discharge. In lithium metal batteries, the electrolyte is a liquid consisting of a lithium-containing salt dissolved in a solvent. The source of the short cycle-life problem is that the electrolyte does not form an adequate protective layer on the anode surface during the first few cycles. This layer, also called solid-electrolyte-interphase (SEI), acts like a guardian, allowing lithium ions to freely pass in and out of the anode to charge and discharge the battery, respectively.

https://scitechdaily.com/toothpaste-ingredient-could-extend-the-range-of-electric-cars/?expand_article=1



Gem & Mineral Society of Syracuse
PO Box 2801
Syracuse, NY 13220
First Class Mail
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www.amfed.org www.amfed.org/efmls [Future Rockhounds](#)

Eight people organized the Gem and Mineral Society of Syracuse in 1951. Since that time it has grown in membership to include adults, families, and young folk. The Society was incorporated in 1969 under the same name.

The objectives of the Society are to stimulate interest in mineralogy, paleontology, and the lapidary arts. Member interests include collecting, identification, and display of minerals, gems, fossils. Members share and develop their artistic skills in jewelry design and creation.

Our monthly meetings provide social and educational experiences. Field trips give collectors chances to find specimens and enjoy the out of doors, exercise and time with old and new friends.

Meetings - 3rd Monday of the month
Future Rockhounds @ 6:30 - General Meeting @ 7:30
(NO Meetings Jul, Aug, Dec)
209 Oswego St (Ponderosa Plaza) Unit 14 & 15, Liverpool, NY
Visitors are ALWAYS welcome!

See online Newsletter <http://gmss.us/resources/newsletter>
 You can also visit our facebook and flickr pages
Annual member dues
Adult \$10 • Family/Couple \$15 • Junior \$5 • Life \$5

If you would like to join or renew membership download the application form (PDF), see <http://gmss.us/about/membershipform.pdf> You can get a form at a meeting or send requests to **GMSS, PO Box 2801, Syracuse, NY 13220** We will mail an application/renewal form to you.

2022 – 2023 GMSS Officers/Contacts

-President: John Sweeney
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-Vice-President: Cathy Patterson
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-Treasurer: Linda Clark
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-Secretary: Teresa Arnold
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