

# BURLINGTON GEM & MINERAL CLUB

## NOV. 2021 // NEWSLETTER

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# BURLINGTON GEM & MINERAL CLUB

## NOV/DEC 2021

### 2021 OFFICERS

- Interim President: Thad Wolosinski
- Vice President: Thad Wolosinski
- Treasurer: Warren Ellison
- Interim Secretary: Carole Graas
- Show Coordinators: Christine Smart and Sue Moraska
- Field Trip Coordinator: John Wilda
- Public Relations: Lexi Boudreau
- Newsletter Editor: Alice Wack
- Webmasters: Kathy and Steve Howe
- UVM Liaison: Steve Howe
- Email Coordinator: Bob Fendrich
- Membership Coordinator: Paul Willard

### CONTACT

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Please contact Editor Alice Wack at [alicewack@gmail.com](mailto:alicewack@gmail.com) with questions, requests to reproduce any part of this issue, etc. If you wish to use any photo or article, please contact Alice for permission first! Most photos in BGMC issues have been taken by Alice, credit will be given otherwise.

### MEETINGS

Regular club meetings are held at 7pm on the last Thurs. of the month (except July, November, and December) in Room 101 in Delehanty Hall, University of Vermont at 7:00 pm (unless noted otherwise). Please come about 15 minutes early - to find your seat for the meeting, and especially as the front doors automatically lock at 7:00 pm sharp. If there is a change, an email will be sent. Prospective members are always welcome. No background in geology, mineralogy, or paleontology is required. **The status of in-person meetings can change anytime due to COVID-19!**



The Burlington Gem and Mineral Club is a member of the Eastern Federation of Mineralogical and Lapidary Societies, Inc. (EFMLS) and the American Federation of Mineralogical Societies (AFMS). Federation-sponsored activities are described on their respective websites.



### AN AWARD WINNING NEWSLETTER

EFMLS BEAC 2021 AWARDS - 2nd place "Large Bulletins"  
AFMS BEAC 2021 AWARDS - 8th place "Large Bulletins"

## ANNOUNCEMENTS

### FROM EDITOR ALICE WACK

### WE WANT YOU TO WRITE ARTICLES

Interested in submitting content - Show and tell, etc? Want to contribute an article on a specialty area of rockhounding (be sure to cite/credit sources!) **You do NOT need to be an expert, just do some solid research and cite your sources. Shoot an email (and photos!) to me at [alicewack@gmail.com](mailto:alicewack@gmail.com).** Holler if you'd like to chat ideas! **DEADLINE FOR 2022: January 20, 2022.**

### NOTE FROM THE EDITOR

This is the last newsletter of 2021! See you next year! Be on the lookout for a call to renew your membership sometime next month. Being a member is super cheap and an awesome deal - especially for families!

### New Year's Resolutions

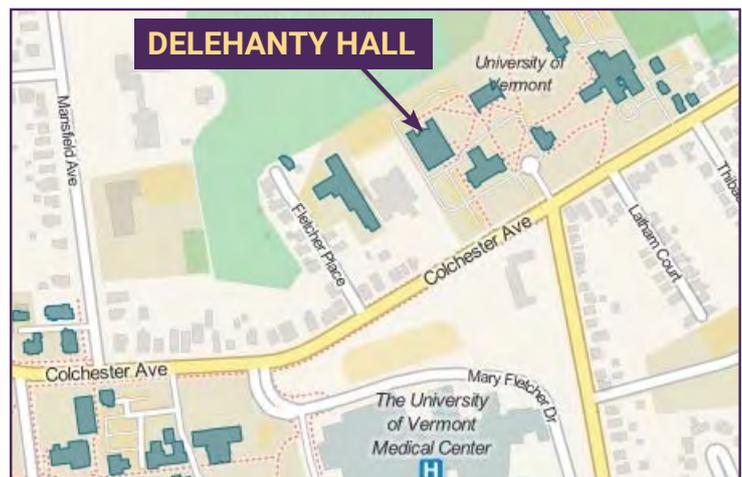
*May you discover lots of beautiful rocks in amazing localities*

*May you acquire stunning specimens at a great deal*

*May you make lots of new rockhounding buddies*

*May you stay safe and healthy in this ongoing pandemic!*

*May you come up with some neat contributions for 2022 BGMC issues ;-)*



### WHERE WE MEET: P.S. MASKS REQUIRED!

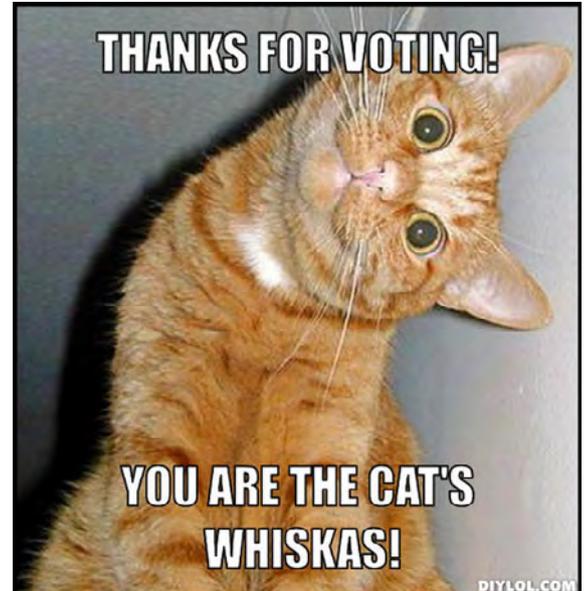
Room 101, Delehanty Hall  
University of Vermont  
180 Colchester Avenue  
Burlington, Vermont  
Parking OK after 6:00 pm (permit required between hours of 7:00 am-6:00 pm; there are exceptions, pay attention to signs!)

# Election Results

## ANNOUNCING OUR 2022 BGMC OFFICERS

Members voted digitally for the new slate of officers for 2022, and the results were announced at the October 2021 meeting. 44 members voted (which is an unusually high participant count!) Our new officers for 2022 are:

- President** - **Lexi Boudreau**, with 100% of votes
- Vice President** - **Rodney Pingree**, with 100% of votes
- Secretary** - **Meghan O'Rourke**, with 100% of votes.
- Treasurer** - **Warren Ellison**, with 100% of votes
- Show Coordinator** - **Sue Moraska**, with 100% of votes
- Field Trip Coordinator** - **John Wilda**, with 100% of votes
- Public Relations** - **Lexi Boudreau**, with 97% of votes (with one surprise write-in... we may ask that person for assistance!)
- Newsletter Editor** - **Alice Wack**, with 100% of votes
- Website** - **Kathy and Steve Howe**, with 100% of votes
- UVM Liaison** - **Steve Howe**, with 100% of votes
- Email Coordinator** - **Alison Nurok**, with 100% of votes
- Membership Coordinator** - **Paul Willard**, with 100% of votes

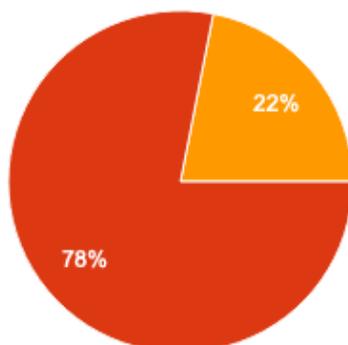


## VOTING RESULTS: POTLUCK EVENT

Members also had the optional opportunity to vote on whether or not to hold the usual holiday potluck in December, delay until spring 2022, or have a potluck in both December and spring/summer! 41 BGMC members gave their input. They overwhelmingly voted to delay until the late spring/summer, where it's more likely that we will be able to hold an event outside with regards to COVID-19 considerations. No one chose the "attend in December" only option, and in hindsight, this was probably a good thing considering the wildfire-like spread of the Omicron variant. We'll likely start planning for this event sometime in the early spring!

Would you attend a BGMC winter/holiday potluck in early December (indoor potluck at the Jericho Community Center) or would you prefer to delay until spring/early summer for an outdoor potluck?

41 responses



- I would prefer to attend in December
- I would prefer to delay until the spring/summer for an outdoor potluck
- I'd like to go to both a 2021 holiday potluck and a spring/summer 2022 potluck!

# Program Recap from OCTOBER 28, 2021

John Wilda did an excellent presentation on cleaning mineral specimens!

The following summary was written and submitted by John Wilda, and edited as needed by Alice Wack.

Photos by Alice Wack.

I was asked by the club to summarize my presentation on cleaning minerals. My prime focus was on [cleaning specimens from] recent trips to Palermo, Bower Powers and Herkimer. I will do my best to cover all of the important points.

After many visits to various **Herkimer** diamond locations and having very limited success, that all changed one afternoon at Diamond Acres. It seemed like every possible location for breaking into pockets was taken. A fellow collector approached me and advised me to look for walnut-sized balls of mud as these often contained Herkimers. He was right! In two hours, I found a half dozen very nice, unbroken "Herks".

I decided to be the first collector the next morning, BUT there was a heavy downpour overnight, all the holes were overflowing with water BUT many of these "balls" were washed off. I went home with over 400 Herkimers from 1/8"- 1.5 inches across. Two lessons: look for balls of mud and after a rain scour the surface when you arrive at ANY collecting site. Also do NOT leave Herkimers in the sun as they may crack or become cloudy. Same for **vivianite** from Palermo. It will not crack, but will darken significantly.

The balls of mud may be found elsewhere. At Varennes in Quebec, it was balls of green and white **natrolite** crystals totally encased in clay. At Loudville Lead Mine in MA, I search for the same thing: balls of mud/clay protecting tiny crystals of **wulfenite**, **pyromorphite** and **drusy quartz**.

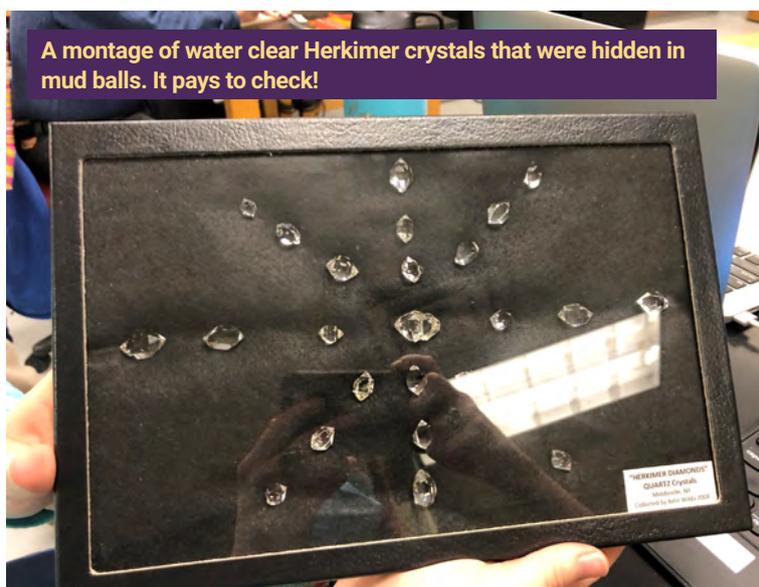
In the field, if you find a large specimen with crystals on one side, if you have nothing to wrap it in, place that side with crystals toward the outside of the bucket. If especially nice, cover the crystal side with a glove, first. I seldom wash off mud in the field as it helps protect the specimen.

After I arrive home from a collecting trip, I rinse each specimen off with water and put on a table to dry. I do NOT use a toothbrush or soap until I wash off the surface dirt (pieces from the Bower Powers locality) and tiny mica flakes (Palermo). When they are spread out, this is a good time to check for fluorescence (both longwave & shortwave). Depending on size, I then separate things into egg cartons for further cleaning, trimming, etc. Do NOT use a brush until you closely examine what you have to avoid brushing off flakes of **autunite** or **microphosphates** (Palermo), or yellow or grey bits of **apatite** or **quartz crystals** covered with **white talc** from Pierrepont.

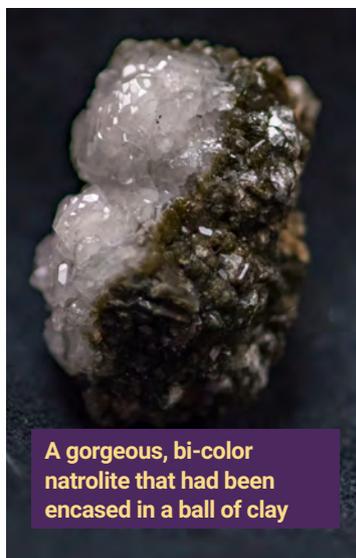
Some of the tools I use for cleaning are Windex, small paint



John holds up a cleaned purpurite specimen



A montage of water clear Herkimer crystals that were hidden in mud balls. It pays to check!



A gorgeous, bi-color natrolite that had been encased in a ball of clay



Some specimens call for extreme caution when cleaning, as they can be very fragile like this pyromorphite from Loudville

# Program Recap from October 28, CONTINUED

brush, dental picks, sewing needles, toothbrush and a cleaning solution of one tablespoon each of Calgon (softener), Dawn (detergent) and vinegar (mild acid), and water (warm but NEVER hot). Soaking for several hours MAY loosen some of the dirt. I use a small Cool Whip container. Iron Out and muriatic acid will be covered later as I do not consider either a cleaning agent. Do NOT soak **uvites** from Bower Powers or the Bush Farm for an extended amount of time as this may affect the outside of a crystal. From these two locations especially, some of the "dirt" or a thin rusty **quartz** coating may actually harden and must be removed with a dental pick or sewing needle. Best done if the specimen has been dried for several months. Anything cleaned with Windex, merely spray on and clean with a toothbrush or small paintbrush and rinse. ALWAYS rinse when you are done cleaning.

I do NOT use an ultrasonic cleaner as this can shatter **quartz crystals**, especially if they contain water bubbles, or it can break the tips of fragile specimens like **wulfenite** or **stewartite**. I also stay away from canned air and high power water cleaners both of which can remove tiny **apatite** crystals and many micros.

Iron out serves a purpose but be certain what you want to remove is iron. Do NOT soak too long as the specimen may get a "washed out" appearance. Works great for rusty specimens from Wise Mine and Bower Powers. Do only a few specimens at a time and check regularly. Iron Out will do in hours what vinegar may do in days or weeks BUT vinegar is more safe. Wear gloves and eye protection when using Iron Out. ALWAYS rinse the specimen in water at least as long as it was soaking in Iron Out.

Alice will write an article soon on the use of muriatic acid which is diluted hydrochloric acid (HCL). I rarely use HCL. I always dilute it further by adding acid to water, NEVER the reverse. Always wear gloves, eye protectors and have water close by in case of a splatter or spill as HCL will cause SEVERE burns and even blindness if you get any (even droplets) in your eye. NEVER use indoors as the gas released is poisonous. Be sure to neutralize with baking soda before discarding. Do NOT pour down the drain. If you do use it on ferrisickletite/heterosite from Palermo, it may turn the specimen a pinkish-purple color (purpurite) BUT do not soak for more than a couple minutes. Always rinse at least as long in water afterwards. Be certain what you intend to remove from your specimen. This can expose green grossular garnets on diopside which may be covered by a thin coating of white calcite from Orford, Quebec. Its primary use is to remove calcite but it will remove other carbonates and alter some minerals as well, such as apatite, tremolite, natrolite, etc. I saw a fabulous specimen of carletonite ruined as the owner wanted to remove the yellow calcite. Always rinse in water twice as long as it was in the acid. KNOW what you have as the effects of both Iron Out and HCL are irreversible!!! Prior to using HCL, you should contact someone who has used it and is familiar with the dangers.

The primary reason for cleaning is to enhance the beauty of a specimen and to prepare it for mounting or display. A microscope, loupe or magnifying glass helps considerably when cleaning as you can view your progress. Remember a 20x microscope will allow you to better enjoy many specimens but it will also magnify particles of sand, dirt AND insects 20 times!!! Labeling, mounting and trimming will be covered in a future article.

Be sure to check for fluorescence during the cleaning process! This unremarkable piece from Palermo was loaded with radioactive autunite that glows beautifully under UV light.



Look for pieces that have hints of cracks or vugs in them - they could contain interesting crystals or mineralization!



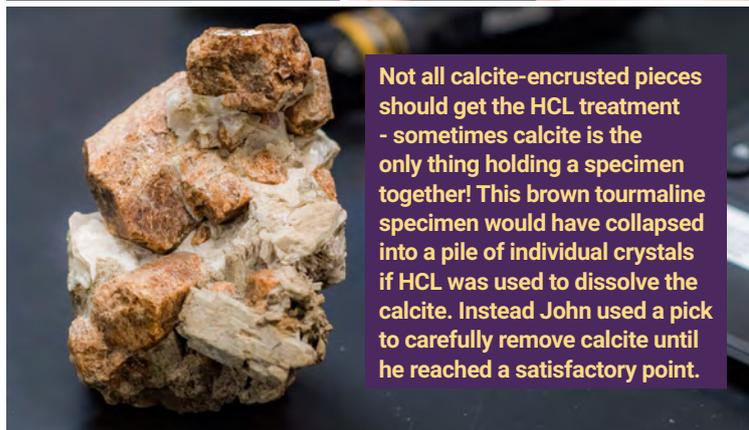
Be cautious about leaving specimens in cleaning solutions (e.g. acid) too long. It can wash out specimens, as seen here with diopside from Orford!



A few minutes soak in HCL revealed the brilliant purple hue of purpurite (from Palermo)



Not all calcite-encrusted pieces should get the HCL treatment - sometimes calcite is the only thing holding a specimen together! This brown tourmaline specimen would have collapsed into a pile of individual crystals if HCL was used to dissolve the calcite. Instead John used a pick to carefully remove calcite until he reached a satisfactory point.



# VERMONT ROCKS!

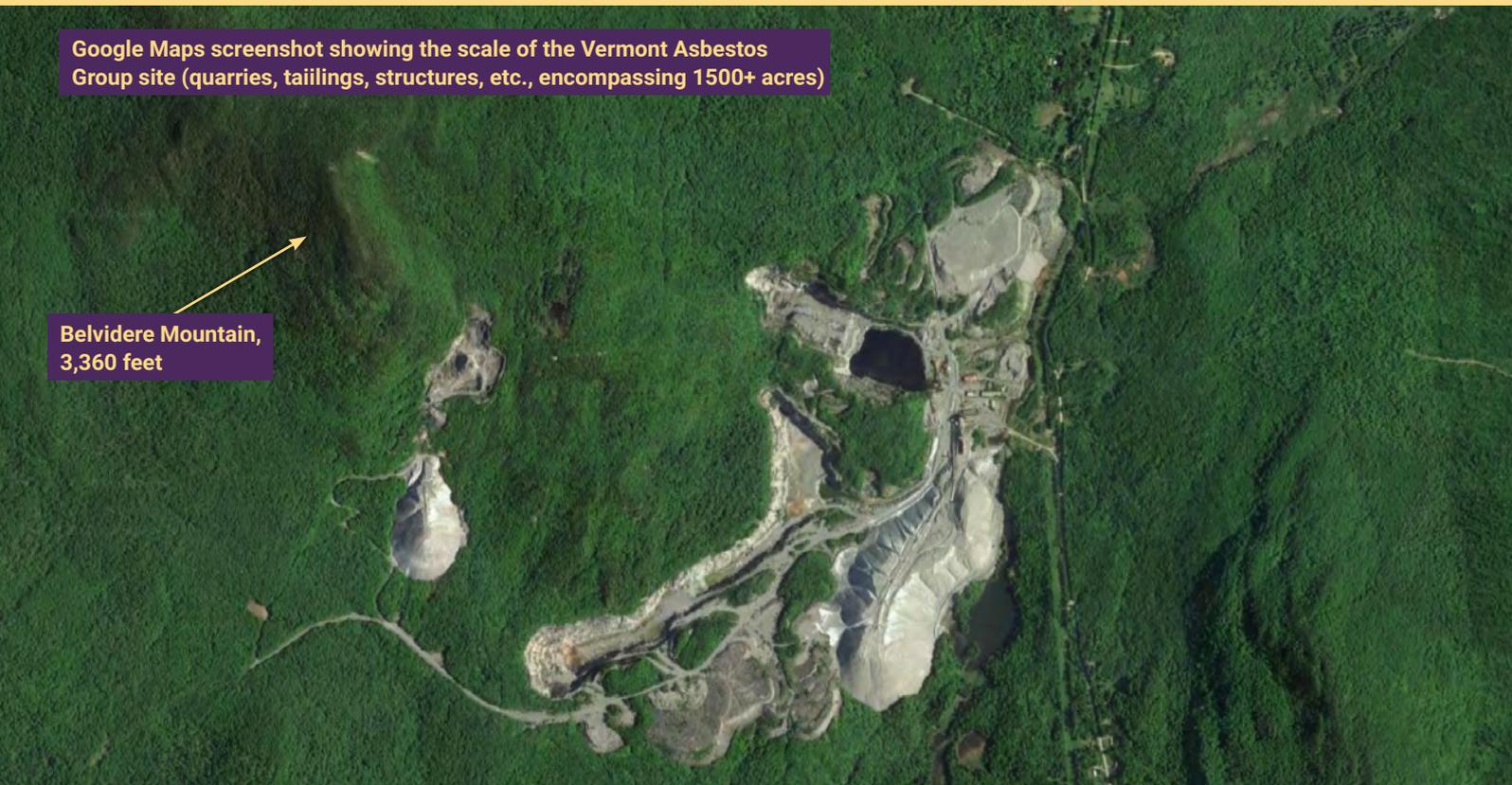
## Featuring Vermont minerals and localities

Written and submitted by Alice Wack, editor

All photos belong to Alice Wack unless otherwise credited.

Google Maps screenshot showing the scale of the Vermont Asbestos Group site (quarries, tailings, structures, etc., encompassing 1500+ acres)

Belvidere Mountain,  
3,360 feet



### A brief overview of the Vermont Asbestos Group Mine and its history

A note from the editor: I've been considering ways to enhance the value of the BGMC newsletter, and thought it might be good to feature Vermont minerals and localities on a semi-regular basis. To kick off this "Vermont Rocks!" series, I thought I'd take a stab at a write-up on the most famous mineralogical locality in Vermont – the now-closed Vermont Asbestos Group (V.A.G.) site.

If you happen to find yourself in the Northeast Kingdom of Vermont – in particular, the vicinity of the towns of Eden and Lowell, you'll notice a startling sight – enormous grey mine tailings soaring hundreds of feet high, spread out over hundreds of acres, in the shadow of Belvidere Mountain. The landscape is akin to that of an alien planet – seemingly devoid of life, harsh, forbidding looking, like the surface of the moon. These tailings can even be seen from high elevations in other parts of Vermont! And if you happen to find yourself at the entrance to the mine ... it's impossible to miss the numerous "NO TRESPASSING" signs.

**It cannot be understated that this locality has been closed for quite a few years now and trespassers will be prosecuted.** People have tried to sneak in here before and have been caught!

Although I will include a basic overview in this write-up, I'm not going to attempt to re-invent the wheel when it comes to describing the mineralogical and mining history of this locality – the November/December 2015 Rocks & Minerals (R&M) issue does an especially spectacular job on this front (thanks for the loan, John Wilda!) If you can find a copy of this issue, you'll find interesting anecdotes, historical mining photos, in-depth geological analysis, and many beautiful photographs of the various minerals that were collected from this locality. Current BGMC members Stu Fenton, Jeff Higgins, and Rodney Pingree all have cameos in this article! Additionally, Fred Wilda, John Wilda's brother, has two brilliant mineral paintings that were featured in the R&M article – view them on Fred's website at: <http://www.naturesfinestcreations.com/products/mineralart/products/MA234.htm> and at: <http://www.naturesfinestcreations.com/products/mineralart/products/MA235.htm>.

I had the pleasure of asking Stu Fenton, who probably has made more visits to this locality than any other BGMC member, a few questions about his experiences there. Many thanks to John Wilda, Bob Fendrich, and Stu Fenton for their assistance and contributions to this amateurish article! Please notify me if you find inaccuracies in this article.

# VERMONT ROCKS!: VERMONT ASBESTOS GROUP MINE

## What is the Vermont Asbestos Group Mine?

This locality is best known as the Vermont Asbestos Group (V.A.G.) mine site, which reflects the name of the last company to “own” the mine.<sup>1</sup> The currently inactive asbestos mine sits to the east side of Belvidere Mountain, near the towns of Lowell & Eden, and comprises of roughly 1500 acres. The site also consists of multiple mine and mill buildings, quarries, structures, and multiple tailing and waste rock piles.<sup>2</sup>

This site is also sometimes currently referred to as the Eden Mine, Belvidere Mountain Quarries, or “Eden Mills Quarries” – although apparently the name “Eden Mills Quarry” is inaccurate and should be discouraged as no part of the mine is actually in Eden Mills.<sup>1,4</sup> The towns of Eden and Lowell are closer than the town of Eden Mills.

During active operations, the V.A.G. site was one of the largest producers of white asbestos in the world.<sup>3</sup> The mine has produced some of the best specimens of grossular garnet, vesuvianite, and epidote ever found.<sup>4</sup> The garnets found there were of such quality that it “led to this mineral being designated as the Vermont state gemstone in 1991.”<sup>4</sup>

This site has a complex history. Asbestos was first discovered on Belvidere Mountain in the early 1800s – circa 1824. But mining of asbestos began in the early 1900s and continued on through various owners until the closure of the site in 1993.<sup>5</sup> Safety concerns over asbestos began in the early 1970s, around the same time that the employees of the former General Aniline and Film company came together to form their own company, Vermont Asbestos Group, resulting in the mine becoming 100% employee owned.<sup>4</sup>

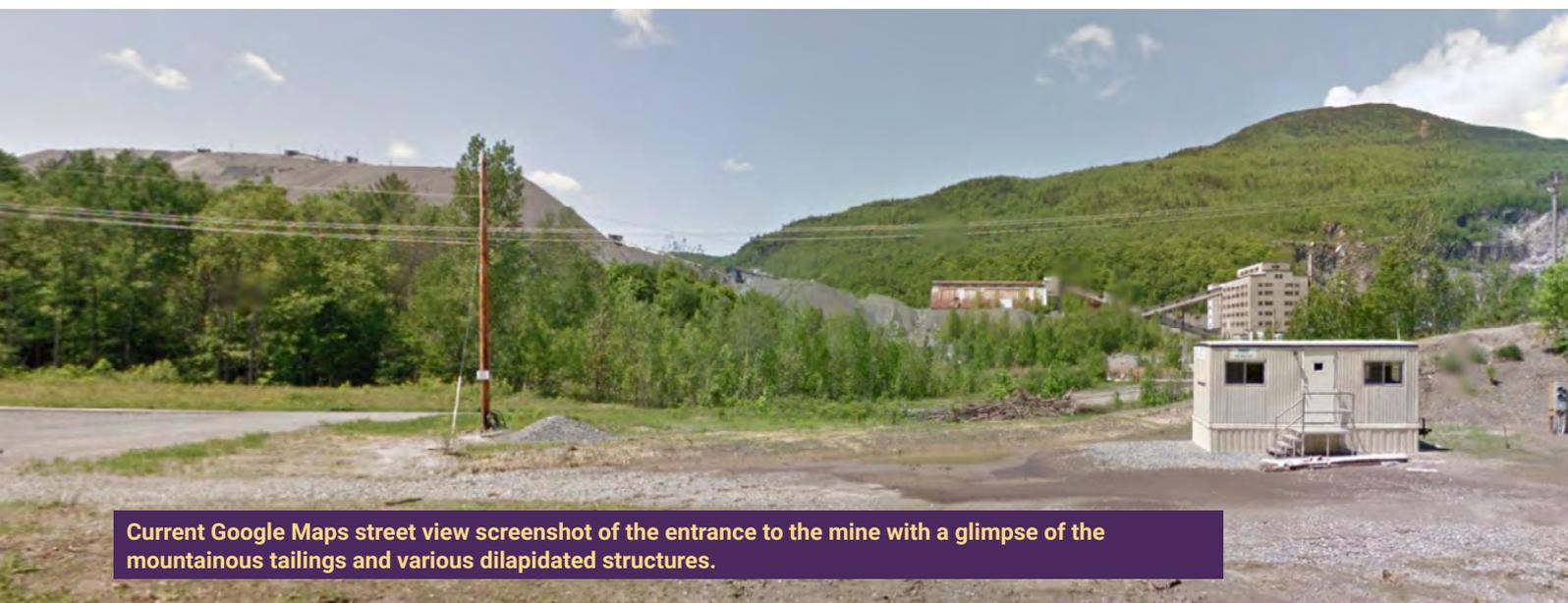
After 1993, circumstances around the environmental and health impacts of the mine get quite murky and controversial, especially with the involvement of the EPA. Today, the asbestos pilings that remain are estimated to be about 30 million tons and the site is considered hazardous.<sup>2</sup> There have been many talks and plans on how to deal with the cleanup and environmental impact of the former mine, but not much progress has been made. In the early 2000s, the Vermont Department of Health (DOH) became concerned about potential health risks to nearby residents. A



**Richard Ransom's specimen - showing beautiful dodecahedral (12 sided) grossular crystals on diopside. These garnets are representative of the stunning quality of grossular garnets that have been found at the V.A.G. site. As per Ransom: "My favorite grossular garnet on diopside. 6.5 cm x 5 cm from the V.A.G. mine Lowell/Eden Vermont. Personally collected. Photo by Jeff Scovil. This mine is closed for collecting and the owner will prosecute!!!" This photo is also featured in the 2015 Rocks & Mineral issue. Photo included here with permission from Richard Ransom.**

DOH study (DOH, 2008) kicked off an uproar both in the local and scientific community.<sup>6</sup> It then turned out that the DOH had been mistaken in reporting “that people living near the mine had an above-average rate of asbestos-related diseases.”<sup>9</sup>

In 2012, residents of nearby Lowell and Eden voted against the mine being designated a Superfund site, with then governor Peter Shumlin siding with the voters, saying “I think we should let sleeping dogs lie on that one and I think that by continuing our mitigation efforts all will be well in Lowell and Eden.”<sup>7</sup> Even now, there is debate as to the actual level of danger presented by the specific type of asbestos at the mine and how to “clean up” the site. The last ‘update’ I could find for the mine was in 2019, when officials released a plan for an \$850,000 settlement from the former owner, which also caused controversy amongst locals (see link to relevant news article at the end of this write-up).<sup>8</sup>



**Current Google Maps street view screenshot of the entrance to the mine with a glimpse of the mountainous tailings and various dilapidated structures.**

# VERMONT ROCKS!: VERMONT ASBESTOS GROUP MINE

## V.A.G. Minerals

According to Mindat, there are at least 79 mineral species that have been found at the V.A.G. site.

Some of the more visually aesthetic minerals that have been collected from the V.A.G. site include spectacular grossular/hessonite garnets, vesuvianite, serpentine, actinolite, diopside in varying shades of green, calcite, chrysothile asbestos. John Wilda has also made specific mention of tiny, gemmy, pink Titanite crystals as well as giant world class Epidote/Clinzoisite crystals. An in-depth list of minerals can be found in the R&M article, as well as online at Mindat: <https://www.mindat.org/loc-4559.html>.

## Collecting and Club Visits to Eden Mine

Collecting from the V.A.G. site began in the 1940s and continued until the early 2000s. According to the R&M article: "In the 1950s, the general manager Irving 'Bill' Matthews

became concerned about people coming into the mine, and ergo, directed that the rock containing the (interesting) minerals be dumped outside the gate in a pile, which became popular with collectors."<sup>4</sup> After the mine was closed in 1993, select collectors were allowed into the mine for some time, but since 2004 access has become impossible.<sup>4</sup>

According to a vintage mineral collecting guide published by the Vermont Geological Survey in 1968, this locality (referred at that time as the "Ruberoid Asbestos Mine") was considered "the most interesting mineral locality in Vermont." The Ruberoid Company took individuals and groups on tours of the mill and mine, and material was dumped outside the gate at the entrance to the property. Collecting from the dumps at the gate was allowed at any time.<sup>10</sup>

The club used to make routine visits to the mine until the early 2000s. I had the pleasure of asking Stu Fenton to recount his experiences there. Read on!

## Q&A with Stu Fenton

**Is it true that collectors have mostly stripped away the accessible minerals and that those who might think about trespassing shouldn't bother?**

It's against the law to enter the quarry nowadays so you won't get in unless you want to take a chance. If you do enter, you'll find there have been a lot of collectors in there and everything that can be easily picked up has been picked up. There is stuff still to be found, but finding it is going to take a lot of time and labor.

**Are there any other minerals produced by the V.A.G. mine besides diopside crystals, grossular, and hessonite garnets?**

Those three are the most found collectible minerals, with the garnet being the most appealing because it's the Vermont state gemstone. Epidote is another interesting mineral that can be found at Eden, but getting to it requires a great deal of labor. For someone who is interested in lapidary and wants to make cabochons, there's a lot of the green serpentine. More than 50 other minerals have been found there, but most people aren't interested in them.

**Do you think the mine will ever be reopened to collecting?**

Not for a while, that's for sure. The EPA has still not decided what they want to do with the stuff at Eden.

**What were the trips the Burlington Club made to Eden like? Was it great fun? Did you need to take any safety measures?**

We always put safety first when we went in. In many cases we knew what we were going after because someone had already scoped it out. So, when the club visited everybody came home with something they were happy with.



**Tell us about your most fabulous finds from the mine.**

The nicest piece is the one we call "Jaws" because of its shape (see photo gallery in this article). It has three basic minerals in it (garnet, diopside, and vesuvianite). Linda discovered it in the C pit shortly after some blasting had been done. The crystals were embedded in calcite, and we didn't discover how good it was until I put it in acid to dissolve the calcite to make the embedded minerals visible. At my suggestion some of the remaining material from the blast was moved by the owner to a safer location and the club went in and everybody got something nice. Sue Haddon now owns the piece.

**Did you ever rappel down to any areas?**

No. We didn't rappel – but we did lower people on a safety line. When we did this, we only lowered one person at a time.

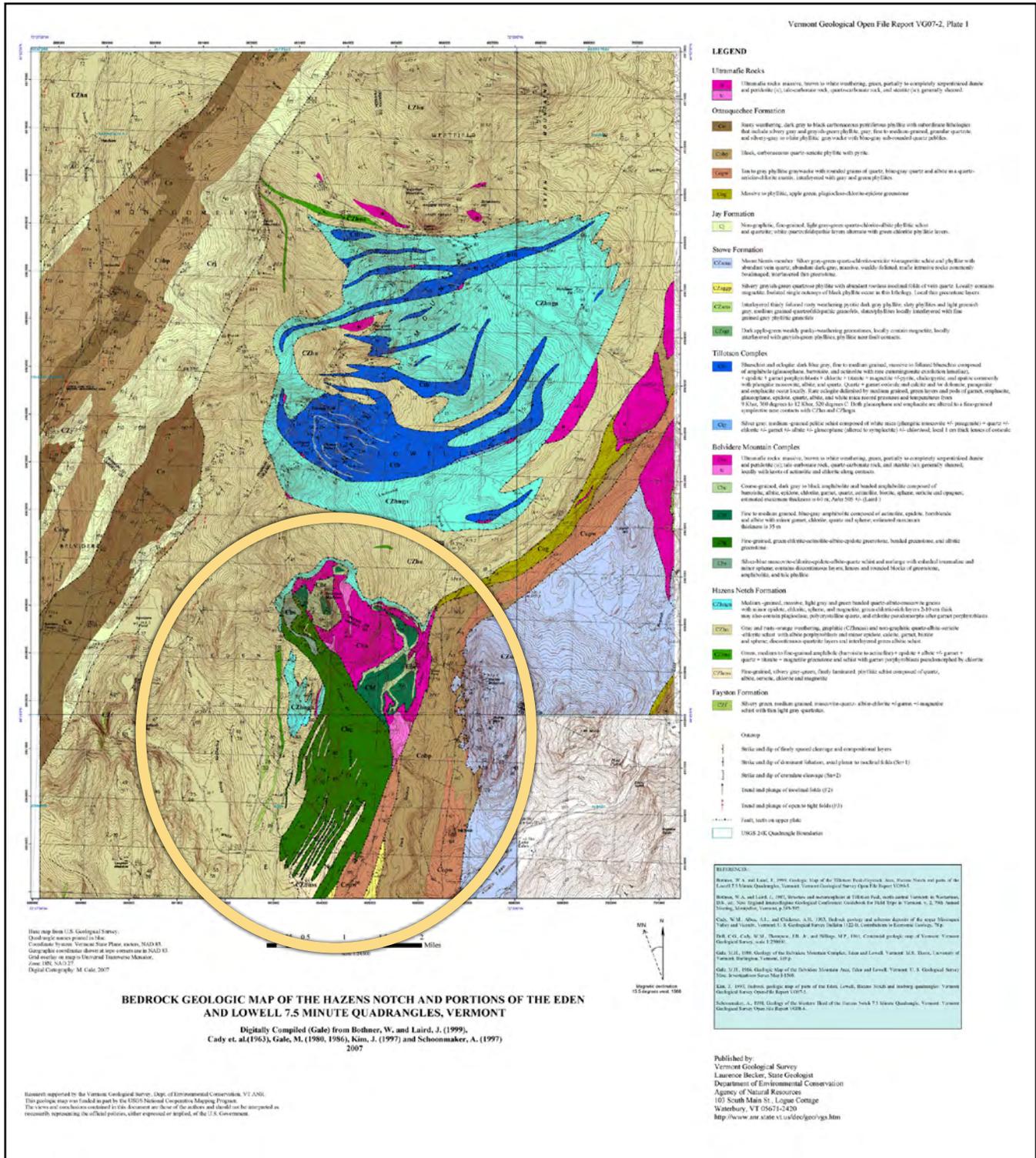
**How did you come to have so many faceted garnet specimens from the mine?**

I did some myself and sent some out. There really weren't a lot of them. The one that are faceted were translucent orange (not the dark ones) and are very rare. I have approximately 10 pieces that I cut.

**Any thoughts on the EPA's requirement about requiring the VAG having until 2023 to clean up 30 million tons of asbestos?**

They've never said a word. We never approached them, they never approached us that I know of. I do not think the mine presents a genuine hazard to collectors because it is the wrong kind of asbestos. It is the long fiber, and the short fiber is what's making the problem.

# VERMONT ROCKS!: VERMONT ASBESTOS GROUP MINE



The V.A.G. mine fascinates mineral collectors, mineralogists, and geologists alike due to "its ultramafic rocks belonging to the northern Appalachian ophiolite belt, the variety of associated metamorphic rocks, and the region's structural and metamorphic history."<sup>4</sup> This bedrock geologic map of the areas of Hazens Notch and portions of Eden and Lowell was obtained from Vermont Agency of Natural Resource's webpage "*The Geology of Belvidere Mountain, Eden and Lowell, VT*" at <https://dec.vermont.gov/geological-survey/vermont-geology/Belvidere>. Of particular interest is the large swatch of dark green and hot pink (in yellow circle) that represents the Belvidere Mountain complex. The pink zone represents ultramafic rock. According to the Rocks & Mineral article, the interesting specimens that have been collected from this locality likely formed as a result "...of the serpentinization process and emplacement of the ultramafic rock."<sup>4</sup>

# VERMONT ROCKS!: VERMONT ASBESTOS GROUP MINE

On these pages, find a number of photos relevant to this article. I recently acquired some macro photography accessories, and decided to try them out on some V.A.G. specimens that I purchased from Stu Fenton during the BGMC 2021 summer auction event. I was very pleased with the results, and one of these days I'll do a macro photography "How to Take Close Ups of Your Rocks" write-up!



Linda and Stu Fenton at a 2020 BGMC meeting



Stu's prize find, "Jaws." Photo by Stu Fenton.



A very nice diopside specimen found by Stu. Photo supplied by Bob Fendrich.



Trays loaded with V.A.G. specimens from Stu - at the 2021 BGMC summer auction event.



**Macros fun:** I acquired this beautiful little garnet/diopside matrix specimen from Stu. I was able to get some excellent magnification on the largest crystal on this piece - which is only about 5mm! The entire piece is about 31mm wide and 28mm tall.

# VERMONT ROCKS!: VERMONT ASBESTOS GROUP MINE



**Macros fun:** This glittering vesuvianite specimen from Stu was more challenging for close-ups, since all the tiny crystals were tightly clustered on the same plane, and very small - the largest ones being about 2mm x 3mm! But I was able to pull out some interesting shapes!



**Macros Fun:** I was pretty pleased with how this one came out. For this small stone, I utilized photo stacking to achieve maximum sharpness. This V.A.G. specimen, which I also acquired from Stu, is a 1.8 carat, 6x8 mm, fractured yet beautiful cushioned-cut cinnamon-colored garnet.

## SOURCES:

1. Mindat Listing: "Belvidere Mountain Quarries (Vermont Asbestos Group Mine; VAG Mine; Ruberoid Asbestos Mine; Eden Mills Quarries), Lowell & Eden, Orleans & Lamoille Cos., Vermont, USA." <https://www.mindat.org/loc-4559.html>.
2. United States Fish & Wildlife Service & State of Vermont Agency of Natural Resources: "FINAL RESTORATION PLAN for the VERMONT ASBESTOS GROUP MINE SITE NATURAL RESOURCE DAMAGES SETTLEMENT," June 2019. [https://www.fws.gov/newengland/PDF/news/VAG-Final-Restoration-Plan\\_2019-07-01\\_SIGNEDpdf.pdf](https://www.fws.gov/newengland/PDF/news/VAG-Final-Restoration-Plan_2019-07-01_SIGNEDpdf.pdf)
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# OCT. 28, 2021 MEETING MINUTES

COMPILED BY CAROLE GRAAS  
WITH EDITS BY ALICE WACK

■ **Editor's Note** - these minutes have not yet been approved. If edits are needed, it will be reprinted in the next newsletter. The BGMC held a hybrid Zoom/in-person meeting on Thursday, October 28, 2021 (about six virtual attendees and approximately twelve in-person attendees) at the UVM Geology Department's Delehanty Hall classroom. Before the start of the meeting, members - both in-person and virtual - had some time to mingle and catch up. President Thad Wolosinski called the meeting to order at 7:08 PM.

## The meeting started with a presentation on cleaning mineral specimens by John Wilda:

■ For the first hour of the meeting, club member John Wilda gave a presentation on cleaning methods for field-collected mineral specimens. John's presentation was full of practical tips on how to identify, carry out, clean and trim specimens found in many of the sites typically visited by our club (a summary of his presentation is at the beginning of this newsletter).

## Business Portion

- Following a brief break, interim president Thad called the meeting back to order at 8:11 PM for the business portion of the meeting.
- **Approval of minutes:** John moved to approve the meeting minutes from last meeting, and Lexi seconded. The minutes were approved unanimously.
- **Treasurer** Warren Ellison reported an income of \$72 for five new memberships, and an expense of \$250 for reimbursement of Palermo Trip expenses to John Wilda.
- **Summer Show 2022:** Next came a

discussion about the status of the upcoming club show. Steve remarked that it is difficult to get speakers to commit to travel and present in person. Rodney suggested that we could ask them to present their talk earlier, record it, and play the recording at the show. Woody volunteered to give a live presentation at the show. In general, there was agreement that pre-recording show presentations at earlier club meetings would be a good idea.

- Sue Moraska asked that this discussion be deferred to a following meeting, at which time we also need to settle on the 2022 show theme [Editor's Note: We determined serious show planning would occur at a remote officers' only meeting on Thursday, December 2, 2021.] Warren and others remarked that since we have no club meeting scheduled in November and December, this would need to be discussed again in January 2022, including our target for the number of dealers we are able to accommodate, since this is usually the time at which we know how many dealers are interested.

- On the topic of **public relations**, Lexi reported that no one volunteered to participate in the TV show interview we were invited to join, but that a couple of people were interested in the opportunity to participate in the metal detection contest.
- For **membership**, Paul reported that the club currently counts 225 members.
- **Election Results:** 78% of those who responded to our survey regarding holding an annual potluck meeting in December, chose to delay until the meeting can be safely held outdoors in the spring. In addition, all our members

who applied for 2022 officer positions were elected. Congratulations to our new officers!

## New Business:

### ■ Door Prizes for Zoom attendees?

In terms of new business, after a discussion on pros and cons, Lexi made a motion to extend our tradition of drawing for mineral specimens door prizes to those who attend the meeting by Zoom, Carole seconded, and the motion passed 5 for, 4 against. Alice volunteered to ship specimens out when needed.

■ **Winners of door prizes:** At this meeting, Tonya had first selection for the featured door prizes - she chose the nice botryoidal prehnite specimen. Rodney was drawn next - he selected the chunky aragonite crystal from Morocco.

■ **Discussion of minors:** Next, we examined a way to update our club's practices regarding mentioning minor (children) members' names in our newsletter, meeting minutes, and any other club publication (not including our field trip membership email lists because that is not public). Carole motioned to include an opt-out check box on 2022 membership forms, Steve seconded, and the motion carried. Keith will send a proposed wording to Carole who will send to Paul.

■ Carole also volunteered to create the **2022 officers email group** for Lexi, our 2022 President. Finally, we settled on our meeting calendar for the remainder of the 2021 year. Steve motioned to meet again in early December to discuss the club show and the motion was seconded. The motion passed. The next club members' meeting will be held on January 27, 2022. Thad adjourned the business meeting at 8:58 PM.

## DOOR PRIZES

Tonya and Rodney won the door prize specimens for the October meeting (pale green botryoidal prehnite and an aragonite crystal).





The "Rose of Maine" before extraction. Photo originally taken by Wayne Flanders from Maine Geological Survey Website

# THE ROSE OF MAINE

## A FAMOUS STORY FROM A NEW PERSPECTIVE

Written by Dennis Creaser, originally posted to the Intergalactic Mining Facebook group in September 2021, shared to the Maine Mineralogical and Geological Society Facebook Group, and republished for this issue with permission generously granted by Dennis Creaser.

One of the most amazing and dramatic Maine mineral events in our state's history was the discovery of the Rose of Maine Morganite crystal in 1989. It rocked the gem and mineral world. The Rose of Maine was found in the Bennett Quarry of Buckfield, Maine by Ronald E. Holden and his entourage.

I was in college at the time, finishing up my final semester at Arizona State. My parents sent me one of the newspaper articles sometime in the autumn and I immediately called my soon-to-be employer, Phil McCrillis, manager of Plumbago Mining Corp, to find out what was going on.

"They found a huge gem Morganite crystal" was the paraphrased reply along with some colorful details.

I had collected at the Bennett Quarry exactly one time a couple of years prior and met the famous Charlie Bragg who had permission to do some mining at the site. He told us that one little part of the quarry was off limits but that we could dig anywhere else. It was in this little corner that an incredible treasure was waiting. But Charlie did not have the time or equipment necessary to recover it.

Enter the outrageous character of Ron Holden. In 1989, he and his brothers and a couple of friends approached Paul Bennett, the owner of the Bennett Quarry with a detailed plan, arrangement, theory and enthralling dream of mining this famous location. Paul was

convinced and agreeable and mining commenced immediately. No breaks, no days off, over 100 days of straight mining using any piece of equipment they could beg, borrow or rent, such was the undeniable passion of Ron Holden. And they found pocket after pocket filled with interesting albeit not particularly valuable mineral specimens.

But on October 7 of that year they drilled into a cavity. Before the day was finished, they had found the most amazing thing that anyone could have dreamed of: an 80 pound gem Morganite crystal in perfect condition attached to a quartz and albite matrix weighing another couple hundred pounds or so. It was at this point that the incredible situation began to go south.

The banks were closed for Columbus Day. There was no way to securely store the crystal. Just looking at it was hypnotic- how much was this thing worth? There was nothing to compare it to. The longer it was observed, the more its value seemed to be. Before long, there was overtly armed security at the mine and as the word got out about the discovery, mineralogical VIPs began to arrive. The situation was not well handled or received. Ron and his entourage were clearly over their heads but who wouldn't be? The crystal was undoubtedly worth a fortune but how big a fortune? No one knew and no one who even suspected would enlighten Ron. The crystal



Photo of a photo from Mineralogy of Maine volume two by Vandall King and others, taken by Tino Hammid. 66.29 carat Rose of Maine Morganite gemstone cut by master faceter Sean Sweeney and currently in the Harvard Peabody Museum collection. Actual stone looks more pink in reality.

# "The Rose of Maine" CONTINUED



This piece of gem morganite, discovered in the Bennett Mine in Buckfield, may possibly be the largest of its type, color and quality. Named "The Rose of Maine" by its owners, the stone measures approximately 13 inches across, with prism faces measuring approximately eight inches by eight inches. The actual gem's weight is estimated to be 80 pounds.

## Large gem found in Buckfield quarry

By KAREN HAMILTON  
Sunday Staff Writer

BUCKFIELD — There's morganite in them thar hills. In an old Buckfield quarry, two brothers from Norway two weeks ago unearthed what they believe to be the largest single piece of gem morganite in the world.

"We expect it to be valued in the millions, but we won't be sure until an expert appraisal has been made," said Gary LaVerdiere, recently working toward a degree in geology at the University of Farmington and is a member of the excavation team.

The rights to the 80-pound stone were owned by Ronald E. Holden and Dennis W. Holden, but they have leased the mining rights

Mine from Paul Bennett, the owner of the property.

"It is a free holden said of mining, you use of it is intuition when you need it.

Morganite is a precious gem from the late financier John Pierpont (J.P.) Morgan. The stone, nicknamed "The Rose of Maine" by the discoverers, is hexagonal in

Pictured - photos of several newspaper clippings from 1989 about the discovery. Photos by Dennis Creaser, clippings in Dennis Creaser's collection

## Morganite

Members of the excavation team, which consists of the Holdens, Gary, Mark and Brian LaVerdiere, all brothers, David Day and Wayne Flanders, estimated the stone to have a value in the millions, but would not publicly set a figure.

Woodrow Thomas, a geologist from

monly found in Maine, Brazil and Pakistan. Thomas, who has not seen the Holdens' stone but has seen smaller specimens of the same type of stone excavated from the mine, said if the larger stone is of equal value to the smaller ones it could be an "important

the Smithsonian Institution in Washington D.C. who visited the mine earlier this year, was contacted by Ron Holden after the recent discovery.

Wise, who has not seen the stone first hand but has had the stone's size, color and quality described to him by Holden and others, said the

mines LaVerdiere and has the learned hands- he has geology

## World's largest gem Morganite

By Robert Knauldt  
BUCKFIELD — The camp site of Ron and Dennis Holden looks like something out of "Paine Your Way."

Working men, fighting back triumphant smiles, as they eat hot dogs and salad bowls cooked over an open fire. But the location is just what the two brothers want, as they search the old Bennett Mine in Buckfield for the largest fragment of gem morganite.

The team consists of Ron Holden, Gary, Mark and Brian LaVerdiere, David Day, and Wayne Flanders. They have been collecting for themselves some very impressive finds, including the largest gem morganite crystal in the world to date.

They had out of that hole, this past week, they pulled an estimated 185,000 carat Morganite crystal, which the team named "The Rose of Maine."

Ron, who has been mining and working with gem stones for over 20 years, knew right away he had a major find. He called the Smithsonian Institution in Washington D.C.

Morganite is a member of the Beryl mineral family. It was named in honor of J.P. Morgan, the famous New York banker. Perfectly smooth surfaces are a wide mark of the mineral which has been found in southeastern Maine, Brazil and Pakistan.



David Day holds up one of the small gems being found in the old Bennett Mine in Buckfield. Photo by Wayne Flanders

was eventually brought to a bank and put into a lockable storage area in the basement.

Christening the crystal as "The Rose of Maine", Ron began to try and market his discovery. His first assessment of its value was far out into extraterrestrial orbit and there was no interest at all. He reduced his price to more of a near Earth orbit and was again met with silence and even a degree of bemused contempt. Finally he received an offer from a museum of around \$25,000.00 which he rejected immediately and unceremoniously. A positively insulting amount, he believed. This was the most incredible thing he was likely to ever find. The offer was pathetic and he would flat out refuse it.

But the bills were piling up, the people who had lent him money and rented him equipment were beginning to grumble threateningly. There really wasn't another option so on November 2nd, he and his entourage went to the bank, retrieved the crystal and brought it to the Bennett property. With a hammer and chisel, Ron proceeded to divide the crystal along its most significant natural incisions resulting in a few larger chunks, a bunch of smaller sections and a number of handfuls of minor shards and pieces.

The investors and renters were paid with chunks of Morganite gem rough. Ron kept much of it and began the confusing, expensive and often disappointing process of transforming the rough into faceted stones. I was fortunate enough to be among the first cutters to process some of the material as Plumbago Mining Corp was Ron's first stop in his effort to have the Morganite faceted.

In the end, there was profit but the industry outrage over his decision to break up the crystal would follow and haunt him until he was killed in an automobile accident sometime in the late 1990s.

It is a tragic tale and Ronald Holden was so misunderstood throughout it. His passion was amazing and contagious. Historians have credited him with instigating a Renaissance of modern Maine gem mining. After all, here was a man with no formal mining training or mineralogical education discovering one of the most



fantastic mineral specimens in the world! We were all inspired and found ourselves bristling with new confidence as we suddenly realized that the multitude of abandoned mines, overgrown and forgotten about in our forests, could still yield glittering and marvelous treasures. Four years later in 1993, Jay Windover, Gary Howard and I would have similar luck under similar circumstances in an old quarry on Deer Hill when we discovered the Fourth of July Amethyst Pocket where many had already searched.

There was a significantly positive effect which emerged from the tragedy of breaking up the Rose of Maine and that was the proliferation of smaller Morganite gemstones which became available and affordable. Instead of one single crystal in a museum, there were now a multitude of faceted gems to be enjoyed by hundreds or even thousands of people.

The Maine Mineral and Gem Museum has the largest and most impressive collection of pieces of the Rose of Maine. There, some of the former glory of the crystal can be realized and the legacy of Ron Holden's vision, fortune and undaunted enthusiasm can be glimpsed.

# News from the EFMLS

From [efmls.org/about-us](https://efmls.org/about-us): The Eastern Federation of Mineralogical and Lapidary Societies, Inc. (EFMLS) is a member of the American Federation of Mineralogical Societies, an umbrella association for the seven Regional Federations in the United States. The EFMLS joined the AFMS in 1952 (date unverified as of this writing). There are seven other U.S. Regional Federations - visit the EFMLS website for more information.

- The EFMLS home page has a call/invitation to advertise your mineral club show or event on their Facebook page. They also seem to have kicked off a new EFMLS Facebook page - follow them at: <https://www.facebook.com/EFMLS>.
- The EFMLS posted a new newsletter for December, which you can find here: <https://docs.google.com/viewerng/viewer?url=https://efmls.org/wp-content/uploads/2020/01/EFMLS-NEWS-December-2021.pdf>. Highlights include:

- Updates about club insurance

- A call for nominees for various EFMLS positions

- Club Rockhound of the Year

# News from the AFMS

From <https://www.amfed.org/index.html>: The American Federation of Mineralogical Societies (AFMS) is composed of the following seven similar regional organizations of gem, mineral, and lapidary societies, including the EFMLS.

- The AFMS has published newsletters for both November and Dec/January 2022 - find both on their website at: <https://www.amfed.org/news/default.htm>
- Interesting highlights from the Nov 2021 AFMS newsletter include: medical safety, AFMS Land Use Policy, and Montana agates. Highlights from the December/January 2022 newsletter include: announcing the AFMS Executive Committee For 2021/2022, a posting of the A. F. M. S. SCHOLARSHIP FOUNDATION, INC. BY-LAWS, and fire safety.

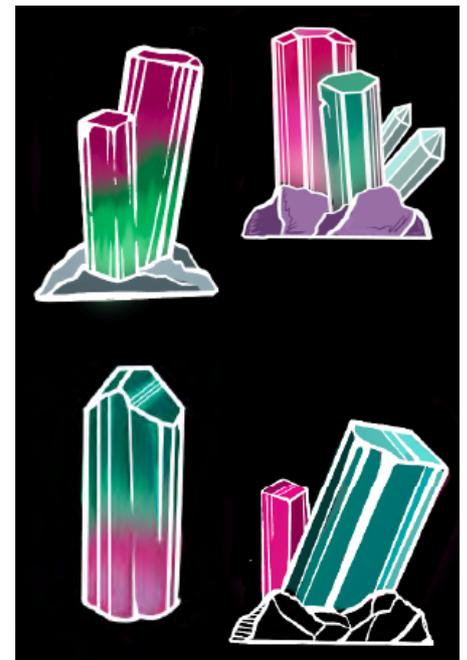
# Odds & Ends



A clever idea for carving pumpkins in 2022! Petoskey ("Pumptoskey") pattern carved into a pumpkin by Erika First aka reddit user djROOMBASinDAhouse. Permission kindly granted by Erika.



Display idea - window box for small agates! Via Michael Bright, Agate Collectors Worldwide Facebook group. This does a great job at letting the sun shine through and highlight the gemmy agates!



A montage of imaginary tourmaline crystal illustrations by editor Alice Wack. Digital art, Procreate app for iPad, fall 2021.

# Call for Papers

Check out this call for the Rochester Mineralogical Symposium. Abstracts are due February 7, 2022. Please note: Because the Technical Session will not be a full Friday session, only a limited number will be presented but all accepted papers will be published. Please note on your submission if you prefer publication only or presentation with publication. The total number of oral sessions is yet to be determined so we cannot guarantee that your choice of presentation/no presentation will be granted.

## Call for Papers

Rochester Mineralogical Symposium  
April 8 (evening) through April 10, 2022  
Technical Session – TBD (Sat or Sun)

**Deadline for Submission – February 7, 2022**

### Please read this CFP carefully.

The Rochester Mineralogical Symposium is soliciting abstracts for short papers in topics of specimen mineralogy, including species mineralogy, topographic mineralogy, crystallography, history of mineralogy, and issues of mineral curation. *The information in the abstract cannot have been published elsewhere at the time of presentation at the Symposium.*

Submitted abstracts will be reviewed and accepted or rejected by a panel consisting of Steve Chamberlain, Al Falster, Carl Francis, Sarah Hanson, Marian Lupulescu, and George Robinson. We will try to accommodate all accepted papers as platform talks at the RMS. All accepted abstracts will be published in the Program Notes and in *Rocks and Minerals*.

**IMPORTANT NOTE:** *Because the Technical Session will not be a full Friday session, only a limited number will be presented but all accepted papers will be published. Please note on your submission if you prefer publication only or presentation with publication. The total number of oral sessions is yet to be determined so we cannot guarantee that your choice of presentation/no presentation will be granted.*

### Guidelines for Abstracts

**Presenting Author:** Each abstract submitted must have a different presenting author. Normally this means one first-authored abstract per person. In unusual circumstances one person might be permitted to present two abstracts during the session.

**Length:** *Maximum of 600 words.* If you ignore this limit and editing cannot reduce your abstract, it may be rejected.

**Figures:** *Maximum of 2 figures.*

#### **Submission:**

**By email** – Send text as both MS Word AND PDF files. Figures must be high-resolution jpg or tiff files. Email to sarahhanson042@gmail.com. If your figure files are too large send via standard email, use Google Drive, SendSpace <<https://www.sendspace.com>>, or Dropbox <<https://www.dropbox.com/>>.

### Projected Timeline

- 1) Abstracts received by 7 February 2022.
- 2) Notification to authors by 28 February 2022.
- 3) Final editorial changes due 14 March 2022.
- 4) Submitted to Rocks & Minerals following meeting.

### Abstract Format

**DISCOVERY OF A VEIN OF GEM SMECTITE, TRANSPARENT PYRITE AND BOTRYOIDAL RUTILE IN MANLIUS, NY.** X. Q. Bonkers, C. L. Snider, and S. C. Chamberlain, Institute for Fantasy Mineralogy, 121 Drivel Drive, Cazenovia, NY 13088.

In the fall of 2008, excavation for a drive-thru wedding chapel in Manlius exposed a vein of unusual mineralogy...

- Note: the name of the presenting author is underlined
- The name, address, phone number, and email address of the presenting author should be added to the bottom of the abstract
- Twelve-point Times Roman is our font standard
- Include figure captions after the text as appropriate

### Presentation

**Digital Projection:** We encourage you to use PowerPoint or Keynote. Digital projectors will be available, and we will provide a shared Windows machine for PowerPoint presentations. If you want to use Keynote, please bring your own laptop.

**Length:** The technical session is divided into 15-minute blocks. Plan on a 12-minute presentation with several minutes to answer questions from the audience.

### Suggestions About Text Style

The most common editorial problem in past abstracts has been the use of technical terms without adequate explanation. Remember that the readership for these abstracts is a mix of professionals and amateurs. Please either define technical terms or use simpler alternatives. Unusual abbreviations should be defined the first time they are used. Thank you.

### Summary

- Prepare abstract as a Word file and a pdf file and submit both.
- Include up to 2 figures (with captions).
- Submit by e-mail (or mail if this is impossible).
- Include the following for Presenting Author:
  - Name
  - Address
  - Phone Number
  - Email address

*Only one abstract per presenting author.*

# Calendar of Events, Humor

## BGMC EVENTS

**Thursday, December 2, 2021**

Special remote BGMC Meeting for officers for early planning/logistics for the 2022 BGMC summer show. Summary/minutes to come in a future issue.

**2021 Holiday Potluck - Cancelled/Postponed** as per popular vote in October; a potluck gathering will take place in the late spring/early summer of 2022 instead

**First Meeting of 2022 - Thursday, January 27, 2022**

Program will probably center around more show planning!

## OTHER MINERAL EVENTS

**February 10-13, 2022 TUCSON, ARIZONA "The Show That Glows"**

The Year of Fluorescent Minerals. The Fluorescent Mineral Society (FMS) celebrated its 50th anniversary in 2021. In recognition of this milestone, the Tucson Gem & Mineral Society has invited the FMS to feature fluorescent minerals at its fluorescent themed 2022 Show and will be providing space for the FMS to organize a world-class exhibit of fluorescent minerals. The Tucson Gem and Mineral Show® is the main event for the more than 40 individual rock/gem/mineral shows that come to life every February in Tucson, AZ. Visit <https://tucsongemshow101.com/schedule-2022> for more information and for even more information about all the other rock-related events that occur between January and February, 2022 in this area!

Feel like traveling further? <https://www.rockngem.com/ShowDatesFiles/ShowDatesDisplayAll.php?ShowState=ALL>

Find even more events via: <https://efmls.org/events/list/>

## ROCKHOUDING HUMOR

