

# Wayne County Gem and Mineral Club News

February, 2019

Always Looking for Places to Dig!



Charcoal or fluorescent sodalite? See page 4



<http://www.wcgmc.org>  
**FACEBOOK link**



Stephen Mayer presents his eurypterid research at our January meeting.

## February Meeting

Friday February 8th, 7:00 PM

Park Presbyterian Church, Maple Court, Newark, NY

Program: **AUCTION NIGHT**

(see *President's Message* on pg. 2 for details)

## Upcoming WCGMC Workshops February 9<sup>th</sup> and March 16<sup>th</sup>

When: 10:00 AM til mid-afternoon

Where: The Weiler's Barn /Club Workshop  
6676 E. Port Bay Rd, Wolcott, NY

Rules: Bring your own rocks.

Training on equipment is available.

Eye protection is required.

\$5/adult to offset maintenance costs.

### An Inconvenient Truth:

**It is winter in western New York**

Should weather decide to interfere with club activities in the coming months, an e-mail note will be distributed and we will post to Facebook and our webpage. You can also contact Linda Schmidtgall, Fred Haynes or Bill Lesniak for the latest update. Their contact information is on page 8.

## Artisans at Work January 12th



## President's Message

Linda Schmidtgall



I'd like to offer a big hearty thank you to Stephen Mayer for sharing his research on Wayne County eurpyterids from Phelps with us at the January meeting. James Keeler and Nikki Chase deserve kudos for finding the file online and uploading it to where we could view it. Heaven help us if I had been responsible for that! I also thank all the club rockhounds for bringing in their finds and creations from 2018 to share and compete (more on that elsewhere in this newsletter). Soon it will be time to start collecting in 2019, although I know we have at least one member doing so already in Arizona. Nancy, I am jealous.

Now it is time for our **fourth annual Winter Auction on Friday evening February 8<sup>th</sup>**. This has been a popular event each year we have held it as part of a regular meeting. Proceeds from this year will help pay for several brand new display cases that Glenn Weiler is building.

We will follow a similar format to last year. After a brief meeting at 7 PM, we will get right into the fun. When you arrive, we ask that you sign in and receive a bidding number place for auctions #2, #3, and #4.

The evening's first event will be a ticket drawing. You will each receive 5 free tickets and extra tickets can be purchased for \$1.00 or 3 for \$2.00. Place your tickets into the bag beside the specimen you hope to win. There will be a small side table of specimens for children 16 years of age and under to bid on with their tickets should they wish.

The second table will be a silent auction with folks entering their bid and bidding number, upping the highest previous bid by even dollar amounts. Always a lot of fun, especially as the "round the table" bidding comes to a close.

I've heard our third event called a white elephant auction. Everyone will place their bidding number and the price they want to bid into a paper bag beside the specimen. The highest bid in the bag will be the winner.

We are saving the highlight of the evening for last. Glenn Weiler will lead a called auction of about 25 pieces from the club collection. Some are really nice. Hold your paddle high to bid. Use it often, but keep it down when you are not bidding!

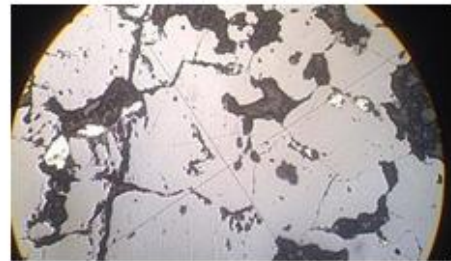
Hope to see you all for this fun event.

*Your President, Linda*

## Can you name me?

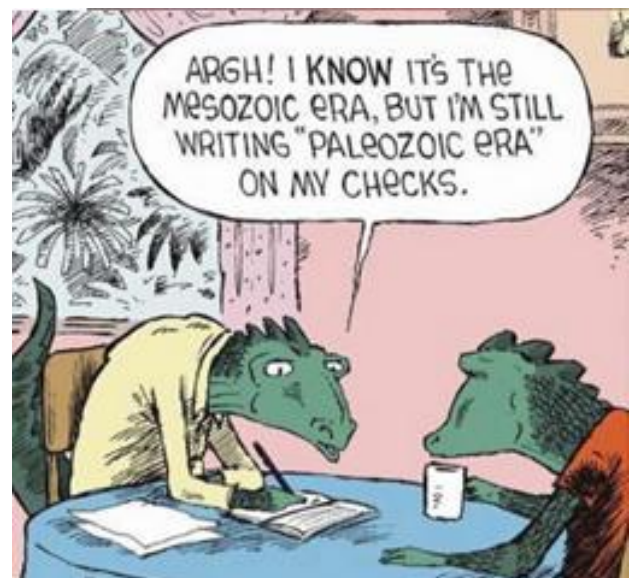


- I am an oxide mineral.
  - I form trigonal crystals.
  - I am slightly magnetic.
  - I was mined in New York from 1940-1982.
- Do you know where?*
- I contain a critical element, one that society needs



I am gray and reflective under normal light

***for answer, see page 7***





# Morrisonite

## By Fred Haynes

If you attended the January workshop you acquired a nice unpolished slab of morrisonite jasper from the club collection. Most present at the event struggled to identify the “best” piece remaining when their raffle number was drawn. It was all so colorful and each piece was unique. I went home with my piece and decided to learn a bit more about my newest acquisition.



**Amanda's number has been drawn and she is selecting her piece of morrisonite from those remaining on the table.**

Morrisonite is a unique form of picture jasper from a small region of Malheur County in extreme eastern Oregon. The unique rhyolite has been called by some “the best picture jasper in the world”. The combination of pattern variation and colors are such that no two pieces look alike. This was certainly true of the 30 or so pieces that were offered to club members at the workshop.

The colorful jasper formed when volcanic ash or other very fine particulate matter was trapped within highly silicic rhyolite flows as the lava cooled. The silica is cryptocrystalline (i.e. chalcedony) and it is these entrapped particles that impart the color and pattern. The freezing from magma happened fast and chaotically. Most of the rock in the region is garden variety pinkish rhyolite, but locally the silica content was higher allowing colorful jaspers to form as the lava flows were converted to rock.

The rhyolite flows of eastern Oregon were sourced from the McDermitt Caldera in northern Nevada which erupted about 16 million years ago in the Miocene Epoch. Interestingly, that volcanic activity was generated by the same mantle hot spot that now resides under Yellowstone Park. The North American continental plate is migrating WNW over the stationary mantle hot spot, effectively transporting older volcanic rock west.



**This is my piece with about the 12<sup>th</sup> pick. It is more colorful than my picture indicates. I am not sure if I plan to cut out a nice shape or polish it as it is.**

Morrisonite is named after the rancher who discovered the colorful rock in 1947. Jim Morison (yes with only one r) found it one day while out exploring the remote regions of his large ranch. Since then the location has been claimed and mined a couple times; from 1986 to 1996 it was mined by Eugene Mueller of The GemShop (Mueller, 2011).

The remote location makes it very hard to work. It is on the side of the steep slopes of the Owyhee River. Primitive roads did get close at one time, but today the site is on BLM land that is considered too remote and rugged for access and the region is considered closed. As a result, prices for high quality morrisonite have risen to as much as \$250/pound in Tucson. That is, if you can even find any.

If you scored a piece at last month's workshop, go put a nice label on it and consider yourself fortunate. I wonder what Linda will bring out next month?

#### References:

Hasenberg, C., 2015, [Rhyolites, CRBs, and the Yellowstone Hot Spot](#), synopsis of talk presented by Martin Streck, Nov. 14, 2014, GSOC lecture

Mueller, E., 2011, [Mining Morrisonite](#), personal blog

## Mineral Musing

### Sodalite-rich Syenite

by Fred Haynes

Perhaps you have heard of the latest collecting craze in the Upper Peninsula of Michigan? Beach collectors who have generally restricted their collecting to agates, amygdaloidal basalt, and perhaps an occasional greenstone are now returning to the beach after dark with a long wave UV light source. They are finding beach rocks that are bright yellow when subjected to a 365 nanometer long wave light source. Apparently there are some beaches where these stones are relatively common.

The rocks are igneous intrusive rocks called syenite. The fluorescent mineral is sodalite. Sodalite ( $\text{Na}_4\text{Al}_3\text{Si}_3\text{O}_{12}\text{Cl}$ ) is one of several feldspathoid minerals that form in sodium-rich magmas that contain so little silicon and aluminum that quartz and feldspar are absent. Nepheline, leucite, nosean, hauyne, lazurite, and cancrinite are other feldspathoids you may have heard of. Although relatively rare compared to granite and other silica-rich igneous rocks, feldspathoid-bearing syenites are found in the interior regions of all the world's continents.

Because the fluorescent stones were first recognized on the beaches of the Upper Peninsula, they were attributed the local name "yooperlites", a yooper is a native of the UP. These stones, are however, not native to the UP, nor is their occurrence restricted to the beaches of the Upper Peninsula, so I personally prefer to give them a name more aligned with their geologic origin. I have acquired a handful through a box exchange with a collector from Duluth, MN and I am labeling them as sodalite-bearing syenite. Mine were collected at Little Girl's Beach in Ironwood, MN, so "yooperlite" is not particularly appropriate for my small collection as they neither originated nor were found on an Upper Peninsula Michigan beach.

So where did they come from? There is no known source of sodalite-bearing syenite in Michigan. Rather, it is speculated that they originated from one of several alkaline intrusive

bodies in Ontario, north of Lake Superior and then were transported south during continental glaciation. The most likely source candidate is the Coldwell Complex near Marathon, Ontario where fluorescent sodalite has been noted (Sage and Watkinson, 1995). In fact those authors note a roadcut along Highway 17 (Transcanadian Highway) where "hackmannite (fluorescent variety of sodalite) occurs in outcrops of amphibole syenite". A field trip in 1995 stopped at this roadcut. The Coldwell Complex fits geographically and the mineralogy/texture of the rocks is similar. It is also the largest known alkaline igneous complex in North America.

It is also possible that the source is an alkali complex completely submerged under Lake Superior. Interestingly there is a large gravity anomaly beneath the lake north of the region of Michigan where the fluorescent rocks are most common that is consistent with a region of alkaline igneous rocks (Shannon Zurevinski, Geology Professor, Lakehead University, Facebook communication, Dec. 2018). If they were indeed part of the large volume of rock excavated by glaciers to form the basin this might explain their relatively common occurrence in the beach rocks today. Regardless of their origin, they offer a new collecting option in a rock hounding region already replete with interesting rocks.



**"Ordinary" rocks by day, colorful by night (under LW UV light).** This was the best combined photo I could find depicting the recent finds. Karin Robinson, a member of the Great Lakes Rocks and Minerals Facebook Group posted these. She reported finding them on Boxing Day evening (12/26/2018) on Lake Michigan near Racine, Wisconsin (i.e. not from the UP of MI). The biggest one is 3" across.

#### References:

Geology.com, entry on sodalite

Mitchell, R. H., and Platt, R. G., 1982, Mineralogy and Petrology of Nepheline Syenites from the Coldwell Alkaline Complex, Ontario, Canada, *Journal of Petrology*, V. 23, #2, p. 186-214.

Sage, R.P., and Watkinson, D. H., 1995, Alkalic Rocks of the Midcontinent Rift, *Institute on Lake Superior Geology 41<sup>st</sup> Annual Meeting Field Trip Guidebook*



## WCGMC at Wayne Central Science Fair by Kathleen Cappon



On January 15th I represented our Club at the Wayne Central Primary/ Elementary Science Fair. Thinking back on all the Science Fairs that I took part in or attended when I taught school, I have never seen one so packed with parents, kids and incredible activities!! Thanks to the efforts of its' coordinator, Diane DiGravio, the whole event was a major success for the school and the community.

Our club display consisted of two tables with fossils and minerals from New York State. One display had ribbons going from the rocks to the locations where they were found. The map was high-lighted with all of the locations our club has visited in the state.

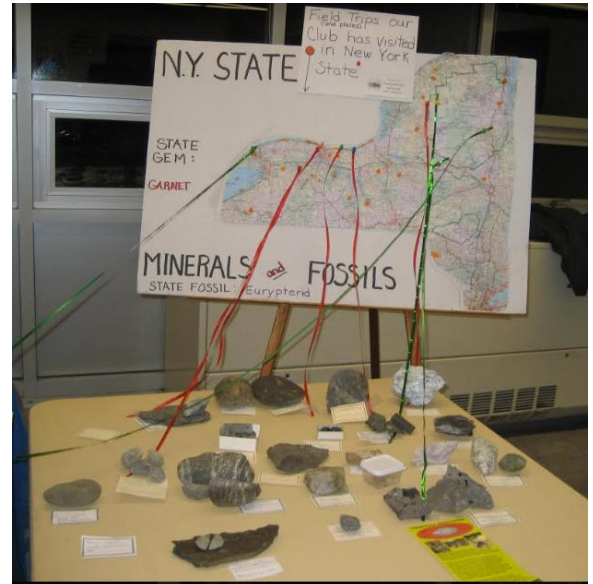


**Kathleen Cappon with her display at the Wayne Central Primary/ Elementary Science Fair.**

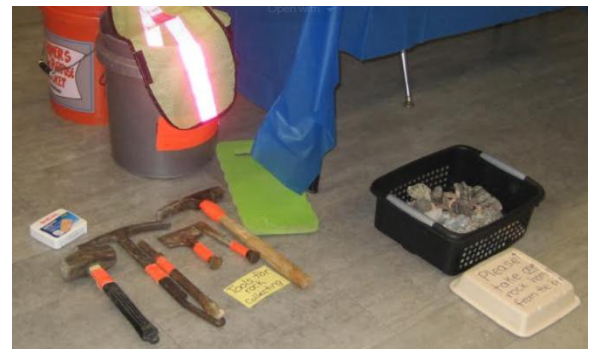
The next table had other minerals and fossils plus some unusual specimens to "catch the eye". These included the State fossil (Eurypterid) and the State gem: (garnet). The most popular and talked about was the Eurypterid AND,....of course, the coprolite !! The specimen of fossil dinosaur poop raised a lot of response and inquiries. Below the table was a display of all the tools used by rockhounds. The kids enjoyed putting on the vests and the hard hats. Next to the tools was a bin of 300 or more samples of blue calcite, magnetite and feldspar with a choice of two to take home!

There were at least 6 children, boys and girls, who were obvious future rockhounds or geologists! You can tell because they handle the fossil and mineral samples with such

interest and ask many questions. Their parents say that they have stones stashed all over the house and yard. Many parents were interested in joining the club and took applications. Dozens of people took home flyers about Gem Fest in June.!!



**With this simple exhibit I could demonstrate both the geology and geography of our wonderful state.**



**Some tools of the trade on the left (complete with a small box of band-aids!) and a box of free rocks. All but 8 of the stones in the "take home" bin were gone so I was 30 pounds lighter as I packed up the car to drive home.**

Even though I was exhausted, I felt that old satisfaction I used to get after a great field trip or a day of teaching something fun. The best thing of all was knowing for sure that a dozen or more kids and adults got interested in ROCKS! I can't wait to do it again.



## The WCGMC January meeting

was packed with activity. Stephen Mayer presented research he has completed during the 2018 field season, working on the eurypterid occurrence along the Thruway in Phelps. Did you know that one of the important eurypterid locations in the state is right here in Wayne County? To read more about Stephen's work with the Phelps location, look back to the [April 2018 newsletter](#).



How many times have we all driven by this roadcut oblivious to the geologic history contained within the rather ordinary looking shales in the exposure?

We also held a show and tell and competition among members for finds in 2018. Eight categories were available. Fourteen members submitted over 40 entries and everyone present at the meeting voted. The categories and winners were:

### Best mineral/rock collected in New York

**Bob Linderbery** – Large Herkimer on matrix

### Best fossil collected in New York

**Linda Schmidt** – pyritized cephalopod

### Best mineral/rock collected outside NY

**Bob Linderbery** – Sharon, VT clay concretion

### Best fossil collected outside New York

**Stephen Mayer** – *Eurypterus remipes*,  
Stevensville, Ontario

### Best piece from Canada

**Bill Chapman** – River Valley Garnet

### Best lapidary creation of your own

**Ed Smith** – faceted smoky quartz

### UGLIEST find of the year

**Kathleen Cappon** – bryozoa in limestone

### Favorite show purchase in 2018

**Glenn Weiler** – polished ammonite plate

Some of the competitions were close. Others were not! The winners all received a slab of kingstonite (copper in conglomerate) cut from the large piece Jim Hird donated in November. Thank you again, Jim.

### Here are a pictures of a few winners:



**Two views of Ed Smith's winning lapidary creation:** The Ed tells us that the "Portuguese Cut is a very good pattern for larger light colored stones. This one is made of very light colored smoky quartz, actually almost a golden color. It is 21 mm wide, 39 carats and has 177 facets. The rough came from an estate sale where I bought the smoky quartz in a coffee can size lot which contained a large quantity of pieces with a variety of very nice colors, almost all were gem quality".



**Two proud winners.** It is hard to see the two large red almandine garnet in biotite schist that Bill Chapman proudly holds. You probably don't want to see the bryozoan-bearing limestone that won Kathleen Cappon her award!



**Two Fossil winners:** Stephen Mayer's *Eurypterus remipes*, both sides, and Glenn Weiler's ammonite plate (~8" in diameter and jam packed with polished ammonites).

## Wayne County Gem and Mineral Club 2019 Schedule *last update Jan. 27*

We don't yet know what that silly little groundhog in Pennsylvania will see in a few days, but whatever he tells us we can be certain that spring is eventually coming and with it the opportunity to get into the field with each other and the rocks/minerals/fossils we all love. At this point our schedule is full of tentative trips and dates that we are working to firm into definite trips. At the February meeting/auction we will seek tentative interest in each of these trips. Some of the decisions around each trip depend on how many are interested and what that group wants to do. Take a look and come prepared to show your interest.

**February 8<sup>th</sup>** Friday meeting, PROGRAM: Our annual club auction, another popular event and a great way to spend Valentine's Evening with friends! Details in next newsletter.

**February 9<sup>th</sup>** WCGMC Workshop Saturday

**March 8<sup>th</sup>** Friday meeting, PROGRAM: **Jim Rienhardt** will bring his sand collection and describe the hobby of collecting sand ([see November 2018 newsletter](#))

**March 16<sup>th</sup>** WCGMC Workshop Saturday

**April 1<sup>st</sup>** - Yup, you guessed it ... Opening Day at Ace of Diamonds and we will be there

**April 12<sup>th</sup>** – Friday Meeting, Program: TBA, *April Workshop date not yet set.*

**April 25<sup>th</sup>-April 28<sup>th</sup>** (Thursday thru Sunday): A few of us plan to join the Buffalo Geological Society on its annual trip to the Cincinnati area for fossil collection. WCGMC member and BGS field trip leader Jerry Bastedo is planning/leading this trip. *Contact Jerry or Fred Haynes for details.*

**May 4<sup>th</sup>(?)** – *Penfield Open House is not yet confirmed.*

**JUNE 1 and JUNE 2: GEMFEST in Canandaigua** (Friday May 31 is set-up day and we will need help)

### TENTATIVE MULTI-DAY TRIPS THAT WE ARE WORKING ON FOR THIS COMING SEASON

*(To receive further information when it becomes available we'll have sign-up sheets at the February meeting or you can send an e-mail to Fred Haynes)*

**June 21<sup>st</sup> to 23<sup>rd</sup>** - southern Vermont/western and central Massachusetts – sites TBA

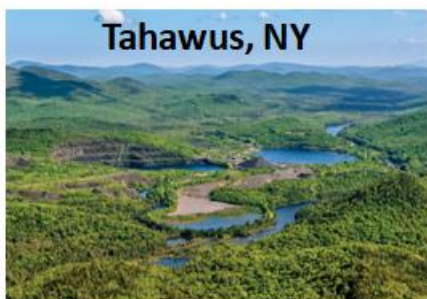
**July ??** - tentative 4-7 day trip to sites in Ontario (or possibly Maine??) – dates and sites TBA

**July 31<sup>st</sup> to August 10<sup>th</sup>** – Upper Michigan. This tentative trip includes the Ishpeming Show on August 3<sup>rd</sup> and field trip locations associated with both that event and with the Keewenaw Days the following week: copper country and more

**August 30<sup>th</sup> – Sept 3<sup>rd</sup>** - central Kentucky with CVGMC. We may add sites in route and on return.

**September (middle of month)** – a long weekend in the western lowlands of the Adirondacks

*Day trips to Ilion, Herkimer country, and to local fossil sites will be added each month. If anyone would like to suggest a location or would like to plan/lead a trip let us know.*



Tahawus, NY

from page 2

### I am ilmenite (FeTiO<sub>3</sub>)

- Titanium is a critical element.
- I was mined at Tahawus in the Adirondacks from an Fe-Ti oxide unit in a Layered Mafic Intrusion.





## Wayne County Gem & Mineral Contacts

### ELECTED OFFICERS (NEWLY ELECTED)

President - Linda Schmidtgal  
[lees@tds.net](mailto:lees@tds.net) 315-365-2448

Vice President - Fred Haynes  
[fredmhaynes55@gmail.com](mailto:fredmhaynes55@gmail.com) 585-203-1733

Secretary - Debbie Breeze  
[debbiegb55@hotmail.com](mailto:debbiegb55@hotmail.com) 585-289-6989

Treasurer - Bill Lesniak  
[Dirtman300@aol.com](mailto:Dirtman300@aol.com) 315-483-8061

### Board of Directors

Gary Thomas [gftthomas956@gmail.com](mailto:gftthomas956@gmail.com)  
 Bob Linderbery [bootmanblues@gmail.com](mailto:bootmanblues@gmail.com)  
 Heidi Morgenstern [morgensternheidi@rocketmail.com](mailto:morgensternheidi@rocketmail.com)  
 Holly Ann Woodworth [autum14513@yahoo.com](mailto:autum14513@yahoo.com)

Past President - Glenn Weiler [gwexterior@gmail.com](mailto:gwexterior@gmail.com)

Visit us on Facebook:

<https://www.facebook.com/groups/1675855046010058/>

### APPOINTED POSITIONS

Bill Chapman – Field Trip Chair  
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Fred Haynes – Newsletter Editor  
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Bill Lesniak – Website Coordinator  
 Glenn Weiler – Workshop Coordinator  
[gwexterior@gmail.com](mailto:gwexterior@gmail.com) 315-594-8478

Linda Schmidtgal – Collection Curator  
 Eric Elias: GEMFEST Show Chair  
[thecrystalnetwork@hotmail.com](mailto:thecrystalnetwork@hotmail.com)  
 Fred Haynes – Facebook Administrator

Club meets 2<sup>nd</sup> Friday of each month starting in Sept.  
 Social meeting at 6:30 PM Regular meeting at 7:00 PM  
 Park Presbyterian Church, Maple Court, Newark, NY

**Website** – <http://www.wcgmc.org/>

Dues are only \$15 individual or \$20 family for a full season of fun. Renewal is in October. Send to:

**WCGMC, P.O. Box 4, Newark, NY**

First Class: Dues, Meetings & Time Valued  
 The Photo is always welcomed



Wayne County Gem and Mineral Club  
 P.O. Box 4  
 Newark, New York 14513