Wayne County Gem and Mineral Club News

January, 2018

Always Looking for Places to Dig!

Need proof that cats like minerals? Here is Leo, and some recently cleaned Arkansas quartz

http://www.wcgmc.org/

FACEBOOK link

The dessert table was popular (see pg. 6).

Next Club Meeting
Friday January 12th, 7:00 PM

Presbyterian Church, Maple Court, Newark, NY

PROGRAM: Egg Crate Collections

WCGMC has handed out it's now famous egg crate rock/mineral/fossil collections at all sorts of community and school events for several years. But we've never featured them at a club meeting. That will change in January. We'll have lots of club inventory minerals as well as surplus from the club's 2017 field trips available. Everyone who attends can make their own WCGMC club collection. This will be a great program for all the kids in the club, and we know "kids" come in all ages. Come prepared to have fun and go home with a new rock/mineral/fossil collection.

And we'll plan to break out the 18 count egg crates and some nice specimens too!

WCGMC January Workshops

There will be two Saturdays for you to cut/grind/polish or otherwise lapidarize your favorite stones this coming month.

January 13th and January 27th

When: 10:00 AM til mid-afternoon
Where: The Weiler's Barn and Club Workshop
6676 E. Port Bay Rd, Wolcott, NY
Rules: Bring your own rocks to saw, grind, polish, or even facet. Training on equipment is available. Eye protection is required. $5/adult to offset maintenance costs.

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WEATHER: Yes, it is that time of year: An e-mail note will be distributed if a Friday meeting must be cancelled. Or call Bill Lesniak (315-483-8061), Fred Haynes (585-203-1733) or Glenn Weiler (315-594-8478).

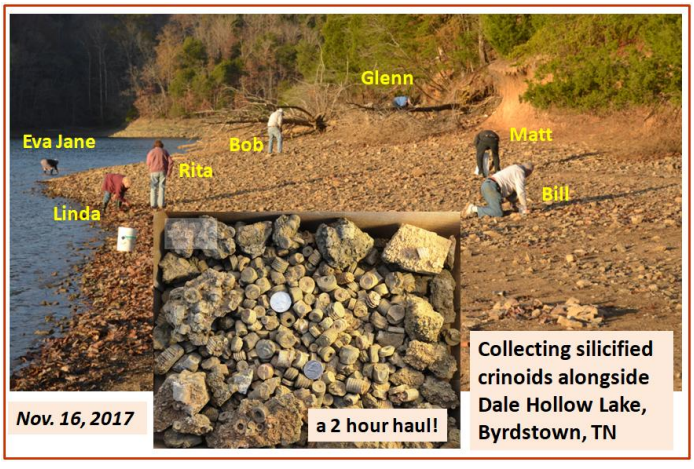
NOVEMBER TRIP : PART II

CRINOIDS, KYANITE, GARNET AND MORE

BY FRED HAYNES

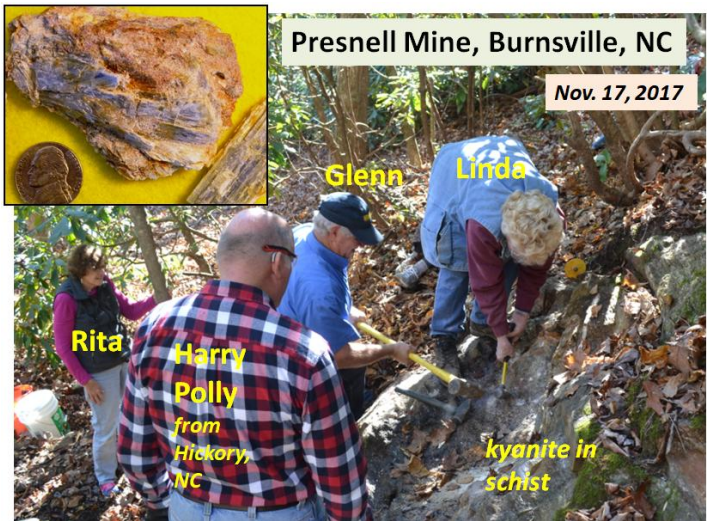
Last month's WCGMC newsletter included a note about the Arkansas portion of the club's November field trip south (quartz, quartz and more quartz). But we did not stop there. After three days of collecting SiO_2 in and around Mt. Ida, Arkansas, ten of us pointed our black van east and headed to Tennessee and North Carolina. There was still a bit of space to fill in the van and in the trailer and we simply could not head north without filling all possible nooks and crannies..

The first stop was on Dale Hollow Lake in Tennessee and the objective was silicified crinoids. We had left our cozy home away from home in Mt. Ida, Arkansas at 5:30 AM, and arrived at the lake with about two hours of collecting daylight. Did we ever claim this was easy? Despite the long shadows we took advantage of the fall's low lake levels and claimed our crinoids. Eva Jane (left side of photo) decided not to let the lake level restrict her collecting area. I'm pretty sure there are several species represented: some are highlighted with thin raised aboral spines along the stems, some with thicker and more widely spaced spines, and others with smooth sides. Perhaps I'll find a time this winter to try to sort and identify mine (see the box inset into the picture below).

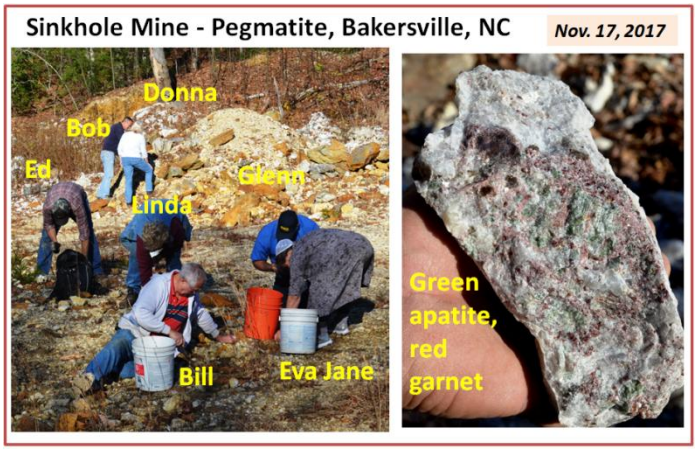


It did get dark (it does that early in November) and we retreated for dinner, but were not done collecting for the day. There was coral in the outcrop behind the parking lot of the restaurant. It was the same Mississippian section exposed along the lake (Haynes, 2013), but here we found the fossilized remains of a large colonial coral mound. Small and large pieces exposed right alongside the parking lot. Flashlights (and car headlights) were deployed: it was fossil coral for dessert!

Friday morning we headed southeast into the Blue Ridge Mountain region of extreme western North Carolina. We were met by Harry Polly, local collector from Hickory N.C, who led us to two of his favorite collecting sites in the region. First he took us to a small outcrop near Burnsville where bright blue kyanite was embedded within schist. It was hard, but teamwork permitted some to be extracted. It may not compete with Brazilian kyanite in color and luster, but we each went home with a few self-collected pieces. I know I value my personally collected specimens above anything I acquire by purchase or trade.



After a couple of hours there, we followed Harry over hill and dale along winding roads past small farms to an old pegmatite mine site. The Sinkhole Mine, was first worked by Native Americans for the ornamental value of its ruby-colored muscovite. Later, feldspar would be recovered from the site. However, our primary finds were bright green apatite and red garnet. The two were often intergrown and it seems somewhat appropriate that I am writing about them during Christmas. The large piece shown on the next page was Bob's find of the day; I wish my camera had captured the vibrant colors better. Oh, we took some muscovite and typical pegmatitic graphic granite home also.



On our final day, we elected to visit the Little Pine Garnet Mine in Marshall, NC. You can saddle up and ride horseback to the site, but we elected to pay our collecting fee and drive there. The site is unique site in that it is possible to collect underground, hacking away to extract golf ball sized garnets from the adit walls. The garnets are hosted by a chlorite phyllite/schist. The schist is hard, but not as hard as the garnets which can be extracted with hand tools. Glenn recovered the garnet in the lower right of the picture below from inside the mine.

The rest of us spent most of our time hunting in the dumps and the streambed outside and below the portal. It was easier work and it was a glorious fall day. The garnets are almandine in composition, and they are virtually all modestly elongated rhombic dodecahedrons. Unlike the more common 12-sided regular dodecahedrons which have pentagonal faces, these garnets have four-sided rhombuses as faces. Their surfaces are rusted and somewhat etched, but we all recovered a few dozen nice-sized garnets loose in the dumps and stream bed.

Unfortunately, all good things must come to an end, and our adventure was no exception. Sunday morning November 19th, we left the southeast in our shirt sleeves. By late that evening we were unpacking the van and separating our personal finds in a snowstorm in Wayne County. It appeared to all of us that the 2017 collecting season was officially over. And we were correct. It is now time to start planning anew. 2018 is fast approaching.

References:

Haynes, F., 2013, Collecting in Tennessee, - link - http://fredmhaynes.com/2013/12/15/collecting-in-tennessee/#more-191

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Were you wondering what the more common "regular" dodecadedron might look like, the one with five-sided pentagonal faces? Well, someone, somewhere created a mineralized version illustrating the 12-sided polyhedral form. It is not a garnet, nor is it a single crystal, but this snow sculpture is a regular dodecahedron and it is composed of crystals.

from Facebook post on "The Rockhound Connection"

Mineral Musings

By Fred Haynes


When it came time for me to select my club gift from the table of bright red boxes at the holiday party (page 6) I did not hesitate. I took one from the midde of the back row and went back to my table to see what I had been gifted. I was not disappointed. I opened my bright red box and pulled out a colorful blue layered rock. The label simply said "Peruvian opal". I was pleased for two reaons: first I did not have any opal from Peru, but more importantly I knew nothing about it. I would have fun back home while the snow fell outside researching my new "acquisition". A third bonus: as a rough piece, it will also give me something to cut and polish at an upcoming workshop.

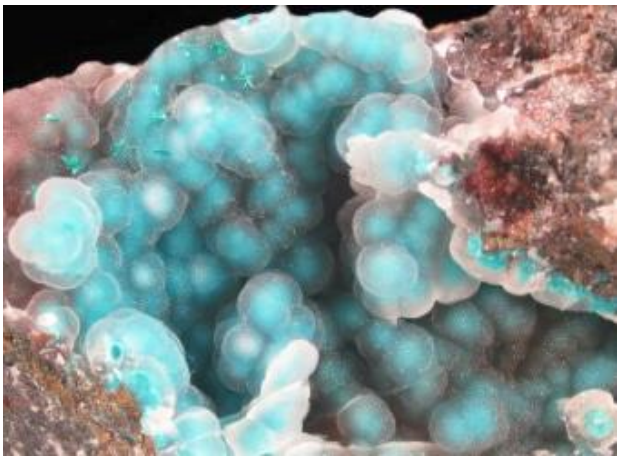
Didn't Linda Schmidtgall do an excellent job prepping gifts for all? There was one for all 59 attendees.

It did not take long once home to learn a bit about the material. I did what I always do for an initial search. I googled "Pervian opal mindat". If you have not tried that technique I encourage you to do so; mindat is an excellent mineral location website. As usual it worked perfectly. I had multiple pictures of the exact material (see photo to the left in the header above the article) and I had a mine and mining district site (Acari Mine, Caravelli Province). I also was informed that the opal is colored by microscopic inclusions of chrysocolla, not by opalescence. That was a good start, but I wanted to know more.

The Acari Mine is located 400 km (250 miles) south of the capital city of Lima in the western foothills of the Andean Mountains. Historically, both iron and copper have been produced there from Cretaceous age intrusive rocks and surrounding volcanics. More recently, in 1986, the district became the focus of a small gold rush, and production of the precious metal continues to this day. Unfortunately the district made headlines earlier this year when miners were trapped in a landslide in the district and there were fatalities (Reuters, Jan. 18, 2017).

Peruvian agate – My Christmas gift from WCGMC. Blue opal is the national stone of Peru. It has held sacred status since pre-Hispanic time and has been used in jewelry, clothing adornments and decorative items in homes and on vessels for centuries (Caucia, et. al. 2014)

There is also pink opal found in the district. The pink color is attributed to the mineral palygorskite which is intergrown with the opal. Palygorskite is a magnesium-rich sheet silicate. To add to their appeal, both colors of "Andean opal" fluoresce green under short wave UV (Mindat). I have yet to test my piece for this property.



In addition to opal, the district is known for a vibrantly hued chrysocolla that is often coated by quartz and/or chalcedony. *(from minfind.com)*

References:

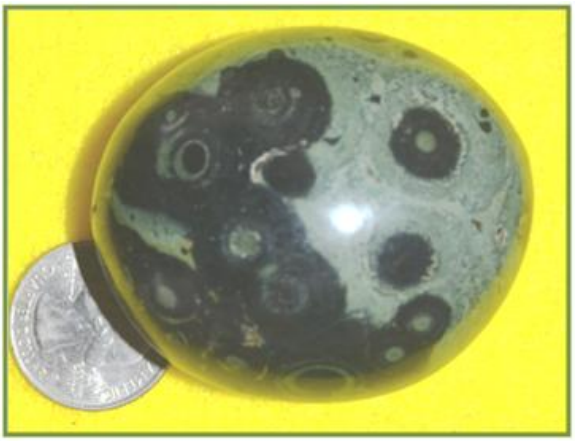
Caucia, F., et. al., 2015, New physical, geochemical and gemological data on opals from Acari Mine (Arequipa Deparment, Peru), J. Min. Geochem., 192/1, p. 73-84

Mindat entry for Acari Mine and multiple annotated pictures of Peruvian blue opal

STROMATOLITES OR MAYBE NOT?

BY FRED HAYNES

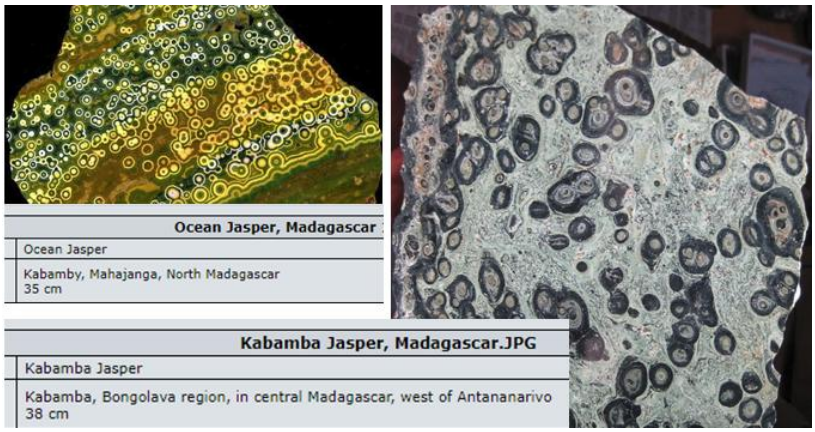
Having collected stromatolites in several locations in New York and Ontario, I was attracted to a small polished piece offered this past October by a dealer at the Rochester Gem and Mineral show. It was labeled **Kabamba Jasper – stromatolite, Madagascar**. It was a pretty green color, showed physical characteristics of a stromatolitic origin, and best of all, it was reasonably priced. I bought it and came home to research the geology and age of my new find. Immediately, things got complicated.



My polished piece of Kabamba Jasper – Madagascar: But is it really of biologic origin?

Sure enough, I found believable and professional appearing entries documenting the material as a Precambrian stromatolite. Spellings varied (Kambaba, Kambamba, Kabamby) and some called it a stone rather than jasper. This was based on textural and mineralogical observations that it was translucent (jasper is not) or not 100% chalcedony. But, numerous sites suggested a biologic stromatolitic origin. And one can certainly purchase it as a fossil stromatolite from a number of online vendors.

Some confusion results from folks holding pieces of the better known ocean jasper, also from Madagascar, that is clearly of volcanic origin. Ocean jasper is either devitrified obsidian, or perhaps partially crystallized and even weakly metamorphosed rhyolitic flows. One entry on a Mineral Forum offered a possible explanation for the confusion introduced by Kabamba Jasper. The entry included a picture of the ocean jasper, purported to be from Mahajanga Province (left below) , and the Kabamba Jasper from the Bongollava region in central Madagascar (right below). This note suggested the latter was of biologic origin and most likely fossil stromatolite. The polished slab on the right does look similar to my piece. At this point, I felt I had learned more about two lapidary products from Madagascar.



from http://www.mineral-forum.com/message-board/viewtopic.php?t=5290

But not everyone agreed. A long mid-2014 discussion on The Fossil Forum told a far different story. After several concurred that Kabamba jasper had a stromatolic origin, a new contributor entered and cited a German mineralogical study of the material. That study claimed that “thin section and micro-probe analysis showed that the rock consisted of quartz and orthoclase with embedded green amphibole aggregates (riebeckite and arfvedsonite) surrounded by aegerine (a pyroxene)”. The authors went on to conclude “the opinion expressed by companies in Madagascar and the USA that it consisted of fossil stromatolite is definitely wrong”.

I was uncertain again, and turned to see if the Stromatolites book I reviewed in the December newsletter (Leis and Stinchcomb, 2015) had anything to contribute. And indeed they did! On page 91 there were two pictures of the material (Figures 6-38 and 6-39). One of the captions read: “Slab of rhyolitic tuff from Madagascar. Many polished specimens of this are labeled and sold as stromatolites (or oncolites). They are attractive, but almost certainly are not biogenic in origin. They appear to be a type of lithophysae.” A lithophysae is a spherulitic felsic volcanic rock, such as rhyolite or andesite.

For me the case was closed. I have a polished spherulitic volcanic rock, likely moderately metamorphosed! If anyone has evidence otherwise, I would love to hear from you.

WCGMC Celebrates Another Successful Year with a Holiday Party

the three kitchen elves

The "party planner"

And how about games and music and awards

We picked up tiny stones with chopsticks. First to ten in the box won a mineral!

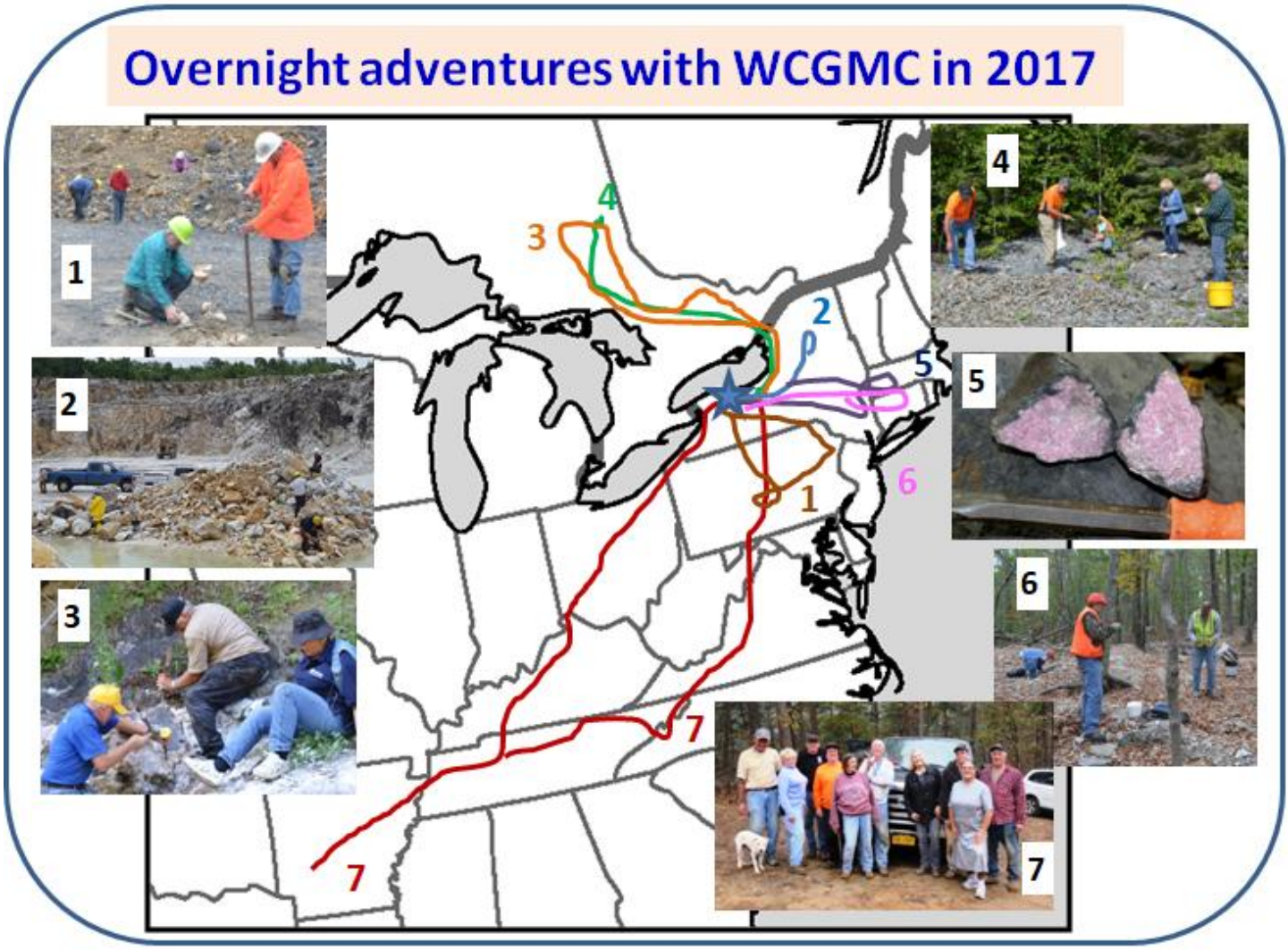
We drew snowmen on paper plates that were held under the table. *Where does Linda get this stuff?*

BOB and DAN were judged to have the best snowmen and carted home nice quartz clusters.

← *The four semi-finalist snowmen as judged by our resident artist, Donna Smith.*

Wayne County Gem and Mineral Club 2017 Field Trips

WCGMC participated in seven multiple day trips in 2017. The longest was also the most recent, an adventure that took us to sites in Arkansas, Tennessee and North Carolina in November. We also explored new territory in Massachusetts and Connecticut and returned to favorite haunts in Pennsylvania, St. Lawrence County and Ontario. Soon (like now!) we will start planning for 2018. What could we do that is new? Where did we go this year that we must go back to? Everyone can have input. Just let us know.



1. Mt. Pleasant Mills and PA plant fossils (May) 2. St. Lawrence Co., NY (June) 3. Eganville, Bancroft, Cobalt, Ontario (July) 4. Sudbury, Cobalt Ontario with NPGS (August) 5. Western MA (Sept.) 6. central CN pegmatites (Oct.) 7. Arkansas quartz and TN+NC (Nov.)

Muscovite

Quartz in Arkansas

Apatite

Travertine

Wayne County Gem & Mineral Contacts

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Visit us on Facebook:
https://www.facebook.com/groups/1675855046010058/

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Bill Lesniak – Website Coordinator
Glenn Weiler – Workshop Coordinator
Linda Schmidtgall – Collection Curator
Eric Elias: GEMFEST Show Chair
thecrystalnetwork@hotmail.com
Fred Haynes – Facebook Administrator

Club meets 2nd 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 14513