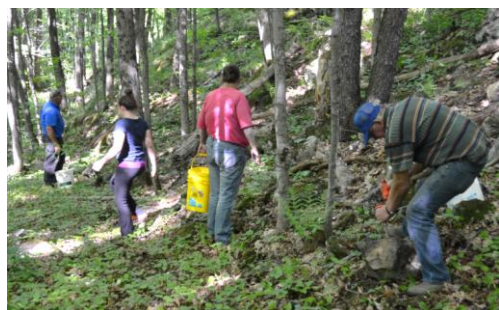


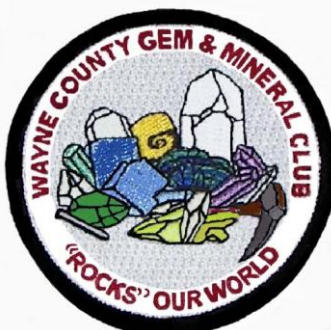
Wayne County Gem and Mineral Club News

June-July, 2014

Always Looking for Places to Dig!



St. Lawrence County Trip #1: Collecting in the woods in Fine, NY. See pages 5-7 for news of our two recent overnight trips to the Adirondack lowlands.



Website

<http://www.wcgmc.org/>



Orange travertine from Jerusalem Road in Ilion. Watch for details of the June 24th club trip to this interesting location in the next newsletter.

Field Trips in July

Tuesday July 1, 2014 - Ace of Diamonds

One can never have enough Herkimer diamonds. Our trip leader, Bill Chapman, is headed there to collect a few more. Anyone interested in joining him?

Wednesday July 9, 2014 - Alden, NY

We will return to Spring Creek in Alden to dig for pyritized fossils (ammonites, cephalopods, trilobites) and nodules (see Site of the Month). Expect water and mud. *We will meet (and park) at the Dollar General store on Route 20 in Alden at 9:00 AM (see page 9).* Leader – Bill Chapman

Saturday June 19, 2014 Canadaigua Lake

This is designed as a family friendly day for fossil collecting at multiple locations along the lake. We will start at the south end of the CCC parking lot on County Road 18 just off East Lake Road (arrive between 8 and 9 AM). Arrive between 8-9 AM. We will journey down Canandaigua Lake for a few stops as the spirit moves. Bring water shoes and suntan lotion. Leader Bill Chapman

Monday-Friday July 21-25, 2014 Bancroft, CA.

A number of us are planning to camp in Bancroft, Ontario and visit as many of the area's mineral sites as possible during the week (Bear Lake, Gibson's Road, Schickler Mine, Beryl Pit, CN Dump in town, Essonville, and others). If you think you are interested call Linda Schmidtgal for logistic details. Trip leaders may change during the week.

see Page 9 for 2014 Field Trip and Show news

GEMFEST 2014 a Huge Success

Our annual show in Newark was held the weekend of June 8-9. Great weather, friendly dealers, lots of kids, and an active program including five presentations by Bob McGuire (better known as UV Bob) highlighted the event (see page 8 for more on GEMFEST). The club officers want to acknowledge all who helped on Friday and Sunday with set-up and take-down. Many hands made the work fun and easy (well easier).



GemFest 2014 Show chairman Pat Chapman (seated) holds court on the show floor.



Mineral Musings by Fred Haynes



New York Names State Mineral ?

Most of you likely know that the Eurypterid (a Silurian-age sea scorpion) holds official status as the state fossil of New York. But did you know that our esteemed government bodies in Albany are busy working on the monumental task of assigning an official state mineral? Bet it will not take you much time to decide what mineral they are considering.

Yes, on April 28th, the New York State Senate passed legislation that could officially assign the "Herkimer diamond" as the official state mineral. The legislation was sponsored by Senator James Seward of Oneonta, who proclaimed that doubly terminated clear Herkimer diamonds were "formed almost 500 million years ago and deserve to be properly recognized across New York." Senator Butler's website goes on to say that Herkimer diamonds are "known around the world as some of the clearest quartz mineral specimens found to date."



Linda Schimdtgall displayed some of her free standing and matrix Herkimer diamonds at Gemfest 2014. Note the chipmunk on the left for scale. These are whoppers!

This is actually the second time that the state senate has approved such a measure, but in 2011 the senate legislation was not acted on by the state assembly. We'll see if the two houses can come together this year. Companion legislation in the Assembly is being sponsored by Assemblyman Steve Englebright.

Did you know that in addition to the Eurypterid state fossil, New York has an official gemstone (garnet), shell (bay scallop), bush (lilac), salt water fish (striped bass), and reptile (snapping turtle, but not an official state mineral).



The New York Eurypterid depicted above is from Allan Langheinrich's online fossil museum collection <http://www.langsfossils.com/museum.htm>

On the June 24th club field trip to Ilion and Cole Hill, eight WCGMC collectors stopped briefly at a site in Litchfield, NY where these critters have been previously found. The two large specimen that Jerry Donahue displayed at GemFest this year had come from the Litchfield roadcut. Unfortunately none were found at the site this visit. -- maybe next time.

Spring Creek
in Alden



SITE OF THE MONTH

Minerals and Fossils together

By Fred Haynes

Many of us have a special passion for collecting aesthetic and/or unusual minerals, while others prefer the varied forms and diverse variety offered by the early-mid Paleozoic fossil collecting that can be done in western New York. There is one site that can please both groups of collectors. Along Spring Creek in Alden, NY, the rich and diverse Devonian fossil assemblage we have all come to know and love is locally fully pyritized. Opening the fissile shale surface not only reveals a 380 MY old fossil, but a shiny mineral specimen as well. The prize is a pyritized fossil. Cephalopods, brachiopods, and ammonites are the most common, but two species of trilobites have also been found completely replaced by the iron sulfide mineral pyrite.

Just north of US Route 20 as it passes through the small town of Alden, NY, Spring Creek has carved itself deeply into the Middle Devonian Ledyard Shale Member of the Ludlowville Formation. Known for decades, the site is readily available to all with two legs, a hammer, a backpack (or even large pockets), and the willingness to perhaps get a little wet and mostly certainly muddy. A short hike along well beaten trails leads to the creek which can be accessed at several sites



There would be 14 folks working this face along Spring Creek if I had not left my position in the middle to take this picture. Others are downstream at a similar outcrop. Notice most are working the same horizon that is about two feet above creek level. This is the horizon with known pyritized fossils.

Not all horizons of the Ledyard shale are fossiliferous and of those containing collectable material even fewer underwent the proper burial sequence to permit pyritization. On a first visit, it is best to go with folks who know the section and the appropriate units to excavate. As it turns out May 10th was one such day. On that sunny and pleasant Saturday, three local clubs independently scheduled visits to the site. The Wayne County Club arrived first, many on site well before 9 AM, but Rochester and Syracuse clubs were not far behind. The total count may have reached thirty by noon time. This did create a bit of a parking issue along Route 20, but fortunately there are long stretches of Spring Creek for folks to spread out and collect.

Many small fossils (or fossil pieces) are now completely encased by pyrite and are simply collectable as pyrite nodules, but the prize is to find a fully fossil still displaying its complete morphology, but completely replaced by pyrite

The pyritization of the 1" ammonite to the right has even preserved the goniatitic sutures that characterize Paleozoic ammonites. The cephalopods below are about 1.5" long and the 15 or so individual septa can be seen on each specimen. Both specimens were found along Spring Creek by Linda Schmidtgal.



Pyritized fossils from Spring Creek in Alden

In addition to the ammonites and cephalopods, various brachiopods and gastropods can also be recovered fully replaced by pyrite. The

replacement process requires a fairly unique series of events during preservation. As with all fossil preservation burial must be rapid to preclude scavenger dismemberment, but that is not enough. Conditions of burial must be reducing (no or very low oxygen) and must be low in overall organic matter, but with abundant iron in the formation waters. Under these conditions sulfate-reducing bacteria thrive and convert sulfate (seawater is high in sulfate) to sulfide. In the presence of iron the sulfide is immediately precipitated as an iron sulfide.

The calcium carbonate in a buried shell or shell fragment provides an excellent location for the iron sulfide to nucleate and the shell is slowly replaced by either pyrite, marcasite or other unstable forms of iron sulfide. Marcasite is not stable once exposed, so we all hope that the iron sulfide we find in rocks or fossils is the more stable form, pyrite. It seems the Alden replacement sulfide is dominantly pyrite and we should not expect rapid deterioration of our finds. Nevertheless, it would be prudent to keep our specimens in a humidity controlled environment, not too high and not too low, to help preserve them.

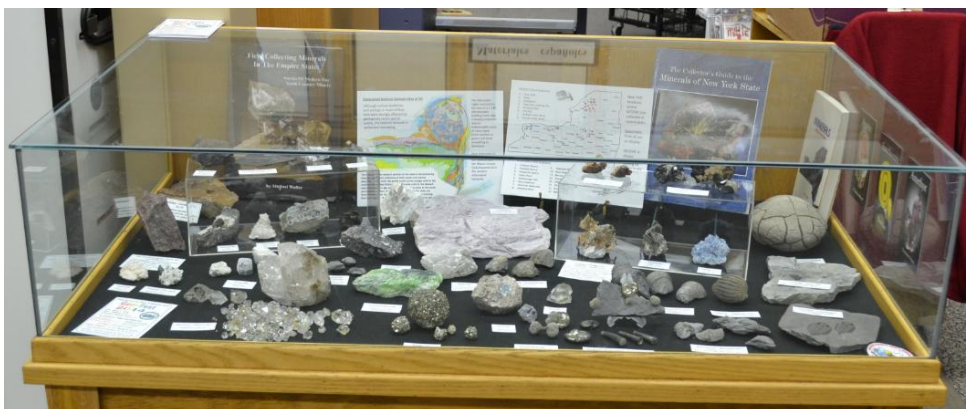
In addition to the pyritized fossils two species of trilobite are also known in the Ludlowville units at Alden. Both *Phacops rana* and *Greenops boothi* are sought by collectors at the site and these fossils can also be found outside the sulfide zone. In fact the site is known for the occurrence of enrolled or coiled trilobites. At a sign of inhospitable environmental conditions at the sediment-water interface where trilobites lived, the critters would roll themselves into as protective a position as possible and wait out the flood or other disturbance that had upset them. In some cases relief never comes and they die in this enrolled state. Finding a complete coiled or enrolled trilobite is a fossil hunter's dream and many of both species have been recovered in Spring Creek.

There are also concretions or nodules of various sizes that weather out of the Ludlowville shale units. These form when calcite cement starts to grow and fill the voids in the shale, usually concentrically from its nucleation point. The cemented concretion is harder than the surrounding shale. Often the concretions occur as somewhat flattened oblong spheres and occasionally they become fractured and broken after formation. The cracks can be filled by vein mineralization, usually calcite. Nodules with this form are called septarian nodules because of the often regular pattern of the mineralized fractures.



Susie Hoch collected this gorgeous and symmetric septarian nodule along Spring Creek on a previous visit to Alden. Can you see it in the back right of the Newark library display below?

The Wayne County Club will be returning to Alden on Wednesday July 9th for its second visit of the year. Check out the details on the calendar page and come join us.



WCGMC library display for May, 2014 in Newark Public Library

NEWARK LIBRARY DISPLAY

The Wayne County Gem and Mineral Club displayed some New York mineral and fossils that its members had collected in the Newark Library in May. Included were specimens from 21 sites, a location map showing the sites and a bit of geology about a number of them. The display was moved to GemFest 2014 in early June.

St. Lawrence County Times Two

In the past month, the WCGMC held two well attended two day trips to premier mineral collecting sites in St. Lawrence County. With near perfect weather conditions on both trips, and withstanding the ever present mosquitoes, both trips were well attended and very successful.

May 31-June 1

Twenty-three WCGMC members converged on Star Lake, NY on the morning of Saturday May 31st for a visit to Benson Mines. We found lots of sillimanite, some fresh, some altered a pretty light green, lots and lots of magnetite including small crystalline surfaces along with massive ore, and huge muscovite books. Jerry Curcio explored ahead a bit at the north end of the property and found an orange calcite boulder that contained large green crystals that appear to be tremolite. We are still working on that identification as the list of known minerals published recently by Marian Lupulescu (Rock and Mineral, Feb. 2014) does not include tremolite. For more on Benson Mines see his paper or go back to our Feb. 2014 newsletter where it was highlighted as the Site of the Month.



Benson Mine iron ore pit is now water filled. Note the steep pit walls on the right (west side).

In mid-afternoon it was on to Fine, NY and the skarn outcrop just off the parking area at the intersection of highways 3 and Highway 58. Steve Chamberlain has proclaimed the coarse grained pyroxene (diopside?) and feldspars from this location to be “aesthetically challenged”, but that did not prevent us from scavenging a few for our gardens or collections. Etched and dull, these large dark green pyroxenes and their long and varied cleavage surfaces may not end up in too many mineral display cases, but they can look nice in a garden or on a patio wall.



The Becker family collecting diopside in Fine, NY

The highlight of this trip was undoubtedly the Saturday night dig at Rose Road in Pitcairn. We all knew what we would find, canary yellow scapolite to long wave UV at the first site on the hill and a dull red short wave response from albite at the second. But to see this in the field after dark was awesome. There was yellow and red absolutely everywhere. I wished I had better photographic equipment to show it all. And we found bluish fluorescence in at least two separate minerals, perhaps smallish cancrinites in calcite and maybe a diopside different from either the green or lavender known to the locality. We will need verification of both responses. Small pink corundum (ruby!) crystals embedded in the calcite also fluoresce a brilliant red in long wave. Finally, a greenish coating on some of the scapolite pieces, most likely an alteration product, actually showed phosphorescence, the ability to hold color briefly after the black light had been removed.



Thirteen hardy folks camped out in Greenwood SF in close proximity to Rose Road for the night time dig. Can you see what Susie is cooking for dinner?

After seeing Rose Road in the dark, all were eager to get back to the site Sunday AM to collect in the

daylight on Sunday. From the albite, titanite, and green diopside at the main pit, to the purple diopside, fluorescent scapolite, apatite, and phlogopite at the secondary pits buckets were filled and cars were laden with collection and garden specimens alike. Of course, the deep blue and tan calcite boulders along the road to the tower were also reduced in size before the group called it a day and headed for home.



We all worked to avoid the gorgeous lady slippers that were scattered around both Greenwood Creek State Forest and the Rose Road property.

June 21-22

Three weeks later, the club went back for more. Green growth now obscured the rocks a bit and mosquitoes and black flies greeted the 19 club members who arrived at Selleck Road on Saturday morning. The two day trip would also include the Powers Farm and two sites where Pierrepont ZCA zinc ore has been stockpiled for road use (or perhaps for collectors?).

The Selleck Road site is in Taylor Creek State Forest about 1 mile west of Route 24 in West Pierrepont. A hunting road leading south off of Selleck road

intersects an east-west ridge that is mineralized by tremolite, fluor-uvite, phlogopite, orange calcite, diopside, and a host of other minor minerals. (see Chamberlain and Robinson's 2013 NY Collecting book for details on Selleck Road and Powers locations).

The motley, but enthusiast, group of treasure hunters trekked the full length of the ridge to the aptly named East pits at the far end of the ridge. The main ridge has been known and collected for several decades and while like green tremolite is everywhere much is etched and somewhat altered. The East pit has a shorter history of exploration and collection and as a fresher site it offers more opportunity.



With a full forested ridge to explore, the first site of a clean fluor-uvite crystal near the East pit had everyone combing the same 100 square feet of the ridge. Scott Jones found the best I saw, but all were rewarded with some of the prized tourmaline. Photo by B. Lesniak



At over 150 pounds in the field (left), the tremolite boulder Ken St. John (left in center photo) found at the East Pit off Selleck Road was too large for transport, but he trimmed the bottom half off, rigged up a transport mechanism and solicited help from John Diaz and Linda Schmidgall to haul what was now 70-80 pounds (right photo) safely out of the woods.

With time to spare on Saturday, Jerry Donahue led us to two sites where the zinc ore and waste rock from the Pierrepont Zinc Mine had been stashed by the highway department, presumably for road use, but perhaps with mineral collectors in mind. The piles contained some sphalerite ore, lots of green and yellow serpentinite, and other Adirondack goodies, (and all right by the cars!), a fine way to close out a successful day of collecting.



Each of us had our own little pile of Adirondack rock to scavenge at this site in Taylor Creek State Forest.

The Powers Farm portion of the trip was actually a split event. A few folks with Sunday commitments visited the site on Friday while the main group invaded the woods just east of Leonard Brook off Post Road on Sunday. The Friday group reported a significant find by Jerry Curcio when a calcite boulder he cleaved displayed a number of terminated shiny black dravite crystals. But there was still plenty left for those who waited until Sunday. It is amazing that this oft visited site continues to produce quality specimens for all who venture there.



Two tourmaline (dravite) specimens from Powers Farm that Fred Haynes collected on Sunday.

As with all trips the minerals are not the only attraction to keep a look out for on these trips. Snakes were spotted on at least two occasions, and glorious ferns grow throughout the wet forest. Two of us stopped on different occasions to help a stranded painted turtle cross a county road hoping the little fellow did not intend a return trip.



This spotted frog thought he could hide out on a lichen coated rock. He could not and now he is infamously displayed in the WCGMC newsletter for all to see.



More from GemFest:

left- Liz Frey and Samantha Carbajal were raffle winners and are holding their polished agate and black light prizes.

Right- Local 4H club displayed minerals and fossils collected in the area.



Gem Fest 2014

1. The show floor!
2. Trip leader Bill Chapman's display
3. Bill Lesniak describes materials handed out in his classes.



4. UV Bob (Bob McGuire, uvbob.com) explaining the beauty and magic of mineral fluorescence in one of five shows he offered during the weekend.
5. The sluice was always a popular spot outside. Here member Terry Wilson (right) assists the recovery of riches and explains the sluice process.
6. Linda Schmidtgal (in pink) guides youngsters in soapstone carving. Dave Millis (plaid shirt at the table behind) assists others create gem trees and other unique mineral crafts.

Wayne County Gem and Mineral Club 2014 Field Trip Schedule

last update (6/28)

This list is tentative and subject to change. As the summer progresses, updates will be provided in the newsletter and on the website. You can always contact our field trip leader, Bill Chapman, if you are uncertain whether you have the latest information.

This month's activities are in red. The next monthly meeting will be in September. Happy Collecting.

July 1 (Tuesday) – Ace of Diamonds Mine, Middletown, NY Leader – Bill Chapman
Join our leader as he hunts more diamonds, mine is open from 9-5

July 9 (Wednesday) – Alden, NY for pyrite nodules and pyritized fossils Leader – Bill Chapman

July 19 (Saturday) – Canandaigua Lake excursion, multiple sites, very kid friendly Leader – Bill Chapman
Meet at south end of Canandaigua CC parking lot off County Road 18 from 8-9 AM, we'll proceed to other sites along the lake from there

July 21-25 (Monday-Friday) - Bancroft, Ontario
Most plan to camp in Bancroft for 4-5 days of collecting in the self-proclaimed "Mineral Capital of Canada" - Call Linda Schmidtgal (315-365-2448) for logistics details

August 16 (Saturday) – Club picnic at the Weiler's home in Wolcott
Midday event, meat provided, bring a dish to pass and a chair, more details to follow

August 23-24 – St. Lawrence County Trip #3 (part of the St. Lawrence Club annual show in Madrid, NY)
Saturday – Powers Farm in Pierrepont for dravite and more
Sunday – Bush Farm in Gouverneur for root beer tourmaline, tremolite and more

WE WON'T STOP HERE, but for now this is what is tentatively slated for 2014

SHOWS and OTHER EVENTS TO KEEP ON YOUR RADAR

July 12-13 Syracuse Rock and Mineral Club, Syracuse

July 31- Aug 1-2 Bancroft Jamboree, Bancroft, Ontario, Canada

Aug 8-10 Springfield, MA Gem and Mineral Show

Aug 22-24 St. Lawrence County Club Show, Madrid, NY



GemWorld 2014

Gem & Mineral Society of Syracuse

48th Annual Gem, Mineral, Fossil & Jewelry
"Minerals & Fossils of the Lockport Formation"

Sat, July 12 10 AM to 6 PM ** Sun, July 13th 10 AM to 4 PM

SRC ARENA @ Onondaga Community College

4586 West Seneca Turnpike, Syracuse GPS 43.003868, -76.197332

\$7 Admission good for both days—\$1 off with coupon
Scouts in Uniform & children under 12 FREE w/ adult

48th St. Lawrence County Rock and Mineral Club Show:

August 23-24, 2014 in Madrid, NY



Madrid Community Center
1835 St. Hwy. 345

*dealers, evening auction,
daily field trips, mineral
collecting fun for all ages*

<http://www.stlawrencecountymineralclub.org/>

Wayne County Gem & Mineral ContactsGlenn Weiler – President gwexterior@gmail.com

315-594-8478

Jerry Donahue – VP Chester145322@yahoo.com

585-548-3200

Eva Jane Weiler – Secretary gwexterior@gmail.com

315-594-8478

Bill Lesniak – Treasurer/Webmaster

Dirtman300@aol.com 315-483-8061**Board of Directors**Ken Rowe gotrox88@localnet.com 315-331-1438Susie Hoch smhrockfinder@rocketmail.com

585-794-7287

Linda Schmidtgal lees@tds.net 315-365-2448Laurie Frey lmcfaul328@aol.com 315-483-9894

Bill Chapman – Field Trip Chair

batnpill@empacc.net

607-868-4649

Fred Haynes – Newsletter Editor

fredmhaynes55@gmail.com

585-203-1733

Club meets 2nd Friday of each month starting in Sept.

Mini-miner 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. Send to WCGMC, P. O. Box 4, Newark, NY 14513

The Public is always welcome
First Class: Date, Meetings & Time Valued



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