# Wayne County Gem and Mineral Club News

September, 2014

Always Looking for Places to Dig!





Fossil trilobites from the "Fossil Fellas" museum in Canandaigua (see page 2). The two large Dipleura dekayi in the center are particularly good finds.



http://www.wcgmc.org//

ALWAYS LOOKING FOR PLACES TO DIG



This terminated clear quartz crystal was found at Powers Farm during the St. Lawrence County Club Field Trip on August 24<sup>th</sup>.

## **Upcoming Events**

#### Friday September 12<sup>th</sup> - First Fall Meeting 7:00 PM, First Presbyterian Church, Newark, NY

Bring your summer collecting finds. Bring extras to swap or sell. We can compare our finds, check out what fluoresces and share stories about our very active summer collecting season.

And we will plan some October-November digs before the snow flies.

## Two chances to collect in September

#### Saturday Sept 13, 2014 Ace of Diamonds Mine, Middleville, NY

A final day this season to collect Herkimers. Leader – Bill Chapman

#### Saturday Sept 20, 2014 St. Lawrence Country Trip #4

We are invited to join the SUNY-Plattsburg Geology Club Field Trip. We will visit Benson Mines in Star Lake in the AM and Rose Rose in Pitcairn in the PM. The Rose Road location has a \$5/person fee. We will meet at the IGA in Star Lake at 10:00 AM

WCGMC Leader - Fred Haynes

# August 16<sup>th</sup> WCGMC Picnic

Over 30 club members enjoyed an afternoon of fun together at Glenn and Eva Jane Weiler's home in Wolcott. Mineral collecting stories and other tall tales were swapped and many minerals had to be cleared from the tables to allow for the pot luck dinner to proceed. Thanks to Dave Millis a number of mineral craft activities were available for those interested; wire screens were constructed, rock saws were in action, geodes were opened, and mineral raffles were held. "Barrel" rides were available for folks of all ages. see more pictures on page 6 of this issue



**Under the picnic tent:** Everyone is checking their raffle ticket numbers as Dave Millis (center) calls out the winning numbers.



# Mineral Musings by Fred Haynes



This summer was active and fun, but I found two events particularly encouraging this summer, in that they involved youngsters. In one case, an extremely motivated group of young fossil collectors, and in the second case, a surprisingly large number of youngsters on a night hunt for fluorescent material.

At our July 19<sup>th</sup> fossil dig along Canandaigua Lake we were joined by a new family. They were not new to fossil collecting, but until Sue Hoch happened to meet them, they did not know of our club. Turns out that 14 year old twins, Ian and Devon Underwood, have been collecting for years and this summer they built a fossil museum In their garage in Canandaigua. Together with two neighborhood friends they created a group called "Fossil Fellas" and opened their museum for the public. Both the Daily Messenger and the Rochester Democrat and Chronicle visited the site and wrote long articles about the group.



There was a crowd in the Fossil Fella's museum when I visited in mid-August..

I was greeted with the same guided tour as all other visitors. Each Fossil Fella provided useful and accurate information on a part of the collection. I learned about crinoids, trilobites, brachiopods, corals and more as the boys showed their well displayed and labeled specimens. The group was particularly proud of their growing trilobite collection including a nice Dipluera collected from the Jaycox member at Deep Run on the July 19<sup>th</sup> trip with us (see photo on page 1). Steve Underwood, Ian and Devon's dad, has taken the group back to that location and to others and they have found several more trilobites and other Middle Devonian treasures.

We look forward to sharing more fossil sites and hunting with the Fossil Fellas in the future.

The second event occurred at the St. Lawrence Mineral Club show late last month in Madrid, NY. As darkness descended on Friday night August 22<sup>nd</sup>, Dino Zack entertained what can only be called a throng of eager youngsters.



Just before dark on Friday August 22<sup>nd</sup>, Dino Zack prepares his growing audience for a fluorescent mineral hunt.

After a brief lesson in geology and minerals, each participant was provided a black light and a paper bag and sent out into the grassy field to collect. Dino later identified their finds, while the lights were passed to the next child. Before it was over more than 70 kids had participated! Each left with a few pieces of willemite from Franklin, some local fluorescents from St. Lawrence County, calcite from Canada, some chalcedony, etc. It was very rewarding to see so many youngsters enjoying an introduction to the wonderful world of rocks and minerals.



Dino Zack identifies a specimen under black light.

## September, 2014 Wayne County Gem and Mineral Club News

The Madrid show also featured field trips each day. The Saturday trip to Powers Farm was attended by 31 collectors. About a third of them were youngsters and this nice terminated quartz was found by one of them, Trinity Baillargear. Sunday a smaller, but equally enthusiastic group of collectors converged on Bush farm looking for fluor-uvite.



Quartz on quartz from Powers Farm.

#### LOOK FOR MORE ON "A RETURN TO CANADA" IN THE OCTOBER NEWSLETTER



Those are titanites! Ken St. John works the rock saw to free several large titanites in calcite matrix from the granite gneiss host rock. Bill Chapman and Linda Schmidtgall look on. Four of us spent the first week of September digging in Bancroft and Eganville areas of Ontario. Come see our finds at the September.meeting. Photo by Fred Haynes



Wayne County Gem and Mineral Club member **Cheyenne Daniels** stands beside her award winning mineral and fossil exhibit at the Wayne County Fair in August.

#### Limerick of the Month

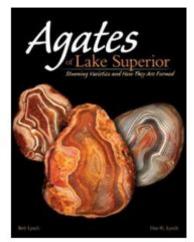
There once was a rockhound named Bill Who loved to dig, chisel, and drill His favorites were Alden pyrite Rose Road for brown titanite And beryl from north of Quadville

Does anyone think they know this "gentleman"?

#### **Book of the Month**

Some of us have been discussing a long trip to the Lake Superior region next summer, Thunder Bay amethyst, Keweenaw Peninsula copper and more, Petoskey stones, and, of course all those Lake Superior agates. If you like agates, or want to see what we might be able to collect there, I can recommend the following book by Dan and Bob Lynch and published by Adventure Publications in 2011. It lists for \$19.95 online, but I found mine at Barnes and Noble.

> 407 color pictures and lots of detail on how various agates form and where to find them





# SITE OF THE MONTH

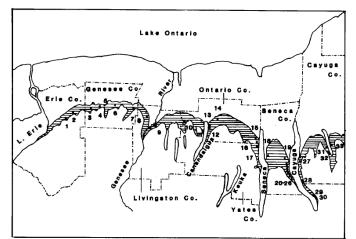
### Devonian Fossils at Deep Run By Fred Haynes

Most residents of western New York carry on their daily business without any knowledge that they live in a region with some of the richest and most diverse fossil collecting in the United States. Those of us in the WCGMC are lucky to know how blessed with are with our collecting opportunities. But do we know the series of geologic events that led to this unique opportunity?

There are other fossil-bearing stratigraphic units in New York, but here we discuss the prolific Middle Devonian Ludlowville Formation within the Hamilton Group. About 385MY ago an inland shallow sea occupied much of western New York and both the sea and the benthic bottom literally teamed with marine life. Corals (both rugose and tabulate), brachiopods, gastropods, crinoids, and, of course, those highly sought after trilobites thrived communally in the shallow seas behind the continental mass to the west and inboard of the Catskill Delta and Acadian Mountains to the east.

Of course, they died also and the next requirement for fossil preservation is a rapid burial preventing scavenging and/or chemical destruction of the hard shell portions. This was helped by occasional catastrophic flooding events from the rapidly eroding mountains to the east. As a result, the stratigraphic column of the Hamilton Group is marked by several thin highly fossiliferous units, many of which are named for the dominant critter that can be found amongst the shale or limestone rock.

But preservation of fossils only permit collecting if much more recent geology generates exposures where they can be collected. For this we benefit from two much more recent geologic features. First, the sedimentary units in western New York all dip just a bit less than 1 degree to the south. This means that progressively younger rocks are exposed as one travels from Lake Ontario to the Pennsylvania border. In fact for each mile south one climbs about 75' in the stratigraphic column. Of course it is more complicated than that because the surface is not flat, but the general progression is very evident in this map displaying the surface exposure of the Ludlowville Formation of the Hamilton Group.



**Exposure of the Ludlowville Formation of Middle Devonian age in western NY** (from Mayer, 1984, modified from Baird, 1979). North of trend older rock such as the Silurian Lockport Dolomite is exposed. To the south, younger rocks are exposed.

But we still have one more problem to overcome. As recently as 12,000 years ago western New York was covered by glaciers and when the ice sheets retreated they left the moraines, drumlins and other surface features with which we are all familiar. And they buried the Middle Devonian bedrock loaded with all those fossils. But glacial action also carved out the Finger Lakes, and erosion since has generated virtually an unlimited number of creeks, gullies, and gorges that cut down through the glacial cover to the fossil-bearing strata. All we need to do is search where those creeks enter the lakes or walk up the creeks to the source.

One such location where this can be done is Deep Run Gully on the east side of Canandaigua Lake. At that location one can climb through virtually the full Ludlowville Formation starting with the Wanakah member and followed by the Jaycox member. The later is capped by the Tichenor limestone, a two feet resistive unit that is easily recognized as it caps the 20' waterfall about 1500'

р. 5

up the creek. Directly atop the Tichenor is the type location of the Deep Run member.

All of these units contain fossiliferous units however the Jaycox interval immediately below the falls is likely the most prolific. Two separate coral-rich beds contain abundant horn coral (Heliophyllum halli) and many species of brachiopods. Although the horn corals are typically solitary coral in that they grow as individuals rather than in colonies, at this location and others along Canandaigua Lake they did grow in small groups. Finding a multiple is a special find (center photo below). Of course, most who venture into any of the Ludlowville Formation sites are most pleased when they encounter any of the trilobite species that roamed the region. See right photo below and many of those depicted in the photo on page 1 from the Fossil Fellas bounty. Many are also from Deep Run.

There is an interesting gastropod species that can be collected in the Upper Wanakah member. The Palaeozygopluera are severely compressed and appear somewhat uncharacteristic of gastropods (left figure below). The Upper Wanakah member represents a deeper water oxygen poor environment. ; Corals are absent and the unit lacks overall species diversity; only the gastropods and a few diminutive brachiopod species survived in the deeper water.

#### References:

- Baird, G.C., 1979, Sedimentary Relationships of Portland Point and Associated Middle Devonian Rocks in Central and Western New York, NYSM Bulletin 433
- Brett, C. E, et. al., 2013, Fossil Beds, Facies Gradients, and Seafloor Dynamics in the Middle Devonian Moscow Formation, Western New York, in 85<sup>th</sup> Annual NYSGA Fieldguide
- Mayer, S. M. et. al., 1994, Correlation of Facies Divisions in the Uppermost Ludlowville Formation (Givetian) across Western and Central New York State, in NYSGA Guidebook, Bulletin 481

FINAL NOTE: Did you know that one of our members, Stephen Mayer, did his M.S on the stratigraphy and fossils of the Jaycox Member of the Ludowville Formation. And his focus area was another creek not far from Deep Run, a smaller tributary called Green's Landing. It is a privately owned site and we hope to he can lead a trip there this fall. Ask him about it next time you see him.



**Deep Run Fossils collected in 2014:** - Left: The gastropod Palaeozygopluera (Fred Haynes collection), Center: Heliophyllum halli - var. confluens (Bill Chapman collection), Right: Trilobites, lower specimen has two individuals atop each other, others are rolled and full (Fossil Fellas collection).

A local collector went to Canada to collect. He'd been digging all day with no success. He was hot, tired, frustrated and a thunder storm appeared to be approaching fast. He looked skyward and proclaimed "Lord, if you can find me a nice crystal I promise I will for to church every Sunday for the rest of my life and I will stop making and drinking corn liquor." When he looked down, there was a large blue beryl poking up of the rock. The collector quickly looked up again and said "Never mind, I found one!"



# Wayne County Picnic (August 16, 2014)



Above: Anticipating an upcoming raffle. On the right, Dave Millis and Ken Rowe prepare the tickets for the draw.

Left: From top to bottom, Gary Thomas, Sue Hoch, and Sandy Wirth are constructing wooden screens.

Photos by Fred Haynes



President Glenn Weiler prepares to crack a geode.



Eva Jane in the "engine" as some of us take a barrel train ride into the corn fields. Yes, that is our distinguished treasurer in the barrel ahead of me.



Dave Millis instructs Gary Thomas how to cut his geode.



Steve Jones and Dave Millis inspect a specimen and Rich Wirth watchs Sandy Wirth cut a geode.



Ken Rowe, a master at work.

Wayne County Gem and Mineral Club 2014 Field Trip Schedule last update (9/5)

This list is tentative and subject to change. As summer moves to fall we will be updating our plans at each month's meeting (second Friday of the month). You will be the first to know of any changes if you attend our meetings, but it is also a good idea to check the website or contact our field trip leader, Bill Chapman, if you are uncertain whether you have the latest information.

NOTE: For insurance reasons club membership is required to attend a WCGMC field trip. You can join at any of the trips, at a meeting, or by sending a form with dues to our PO box (see final page).

September activities are in red. Don't forget the Friday meeting on September 12<sup>th</sup>

September 13 (Saturday) – Another day at Ace of Diamonds in Middleville, NY Leader – Bill Chapman

September 20 (Saturday) - We are invited to join the SUNY-Plattsburg Geology Club Fall trip. They will visit Benson Mines in the AM and Rose Road in Pitcairn in the PM. Two neat sites We will meet at the IGA store in Star Lake at 10:00 AM SUNY Plattsburg Leader – Dr. Mary Roden-Tice, WCGMC Leader – Fred Haynes

October 11-12 (Saturday-Sunday) - Walworth Open House (Sat 7:00AM-2:00PM, Sunday 7:00AM-noon). Arrive early for safety talk. Wear long pants and boots. Bring safety glasses and hard hats. Leader – Bill Chapman

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

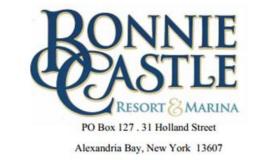
#### SHOWS and OTHER EVENTS TO KEEP ON YOUR RADAR

- Oct. 10-12 NYSGA Field Trip Symposium in Alexander Bay, NY (http://nysga-online.net/)
- Oct. 25-26 Rochester Gem, Mineral, Jewelry and Fossil Show and Sale (http://www.rochesterlapidary.org/show/)





86th Annual Meeting New York State Geological Ass. October 10-12, 2014, Alexander Bay , NY



Many Saturday and Sunday Field Trips Host: St. Lawrence Univ. Dept. of Geology http://nysga-online.net/

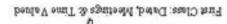
#### Wayne County Gem & Mineral Contacts

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Bill Chapman – Field Trip Chair	
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Fred Haynes – Newsletter Editor	
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Club meets 2<sup>nd</sup> 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







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