# Southern Maryland Rock and Mineral Club



# Rock Talk





# February, 2020

## Next Meeting: February 25, 2020@7:00 PM

### **Program**

"Quarry Safety"
Rich Simcsak
Refreshments
Jennifer Weeks
Clearwater Nature Center, 11000 Thrift
Road, Clinton, MD.

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# Request for Virginia Minerals at March Meeting

As you probably already know, Tom Hale is going to be our Guest Speaker for our March 24<sup>th</sup> Rock Club meeting where he will present what he has done so far for his huge undertaking called the "Virginia Mineral Project". It is basically an update of Dr. R.V. (Dick) Dietrich's 1970 book titled "Minerals of Virginia" in which Professor Dietrich (VA Tech geology professor) documented the occurrences of minerals in each Virginia county. Tom Hale intends to gather stories and pictures of VA minerals from local rockhounds like us.

To add interest to the March meeting, it is requested that each of our members bring a flat (or more) of a sample of VA minerals to the March 24, 2020 meeting. We have been to many VA locations over the years --- Morefield Mine, Dobbins Prospect, Ligon Mine, Jones Creek(complex mica), Contrary Creek in Mineral, Rice (amethyst), Prospect (amethyst), Willis Mountain, Baker Mountain, Earthen Paradise (blue kyanite), Northern VA traprock quarries, US Silica mine in Hanover County, Chestnut Ridge

(quartz) – plus you may have purchased VA specimens. Your choice of which to bring---all specimens are welcome.

## **JANUARY MINUTES**

Submitted by Cheryl Reese

**DATE:** Meeting was called to order on Tuesday, January 28, 2020 at 7:05 by Sondra

#### **VISITORS/NEW MEMBERS:**

Twenty-one members in attendance with 3 visitors present

**MEMBERSHIP:** There are now 60 paid up-to-date members.

**NEWSLETTER:** Tim will no longer be the editor, he will greatly be missed. Please see Sondra if you would like to take this position in the club.

TREASURER: No change.

**FIELD TRIPS:** Dave said a high school teacher from Michigan contacted him about fossil hunting in this area. They will be here from April 4-11.

Sam Linton from the Montgomery County club is now also with the Shenandoah club and has volunteered to set up some trips that we may be invited to starting in march.

March: Last weekend, trip to Chestnut Ridge

March 21<sup>st</sup>, 2020 Odessa Delaware with CMM fossil club for petrified wood. Flint and arrowheads can also be found

April 17<sup>th</sup> or 18<sup>th</sup>: Our club will be invited to the new museum opening directed by Lance Kearns at JMU. Three specimens alone at this museum are worth 1 million

April 25<sup>th</sup>: Franklin NJ Super Dig for florescent minerals, you must register for this in advance ASAP. Information can be found thru EFMLS.

May 16-17<sup>th</sup> ??: Joe and Paula are considering planning a trip to Herkimer diamond mine in New York.

**PROGRAMS:** February: quarry safety by Rich Simcsak. Refreshments: Jennifer

March: Tom Hale who is rewriting the book on Virginia gems and minerals will present. Refreshments: Teresa Jones

April: Dale Greenawalt will speak on the fossil record of blood. Refreshments: Ralph Gamba

May/June both programs and refreshments are needed.

July: Denise Wilson will do a program on pearls. Refreshments:?

**WEBMASTER:** Last 3 newsletters will be added to site.

**OLD BUSINESS:** None.

**NEW BUSINESS:** Flo Stream willed her house to CMM fossil club and she gave Dave a box of items that the club decided to save for the august club auction.

Sondra is attending EFMLS convention in hickory N.C in March and will also be attending AFMLS in Knoxville in October. Thank you Sondra for representing our club!

**ADJOURNED:** At 7:55 followed by door prizes and a game called "Box of Rocks". Greta taught this and oversaw the rules etc. Katie brought refreshments.

## **ITEMS WANTED/FOR SALE**

For Sale – Virginia unakite slabs (approx ¼ inch thick) – \$0.50 per square inch (this is half off regular price). Call Dave (240) 427-7062.

For Sale – SMRMC Only 4 remaining t-shirts for sale: size small (1) at \$9.00; and large (3), also at \$9.00 each Contact Tina @ htleague@comcast.net

Lutheran Church, 45 Worthington Mill Road, Richboro, PA Fri Noon to 6 pm, Sat 9 am to 6 pm. Reservations required for table space. 610-584-1364, donmcalarnen@outlook.com

March 21-22, 2019: 56<sup>th</sup> Annual GLMSMC Gem, Mineral and Fossil Show, Montgomery County Fairgrounds, Gaithersburg, MD. glmsmc.com/show.shtml

March 28: Philadelphia Mineral Treasures & Fossil Fair, Lu Lu Temple, 5140 Butler Pike, Plymouth Meeting, PA, Philyrocks.org.

March 28-29: Che-Hanna Rock and Mineral Show, Wysox Vol. Fire Hall, 111 Lake Road, Wysox, PA chehannarocks.com.

March 28-29: Franklin County Rock and Mineral Club Show, Hamilton Height Elementary School, 1589Johnson Road, Chambersburg, PA.

# Rocks, Minerals, and Fossils in the News

#### **UPCOMING SHOWS AND EVENTS 2019**

March: 7 - 8: 57<sup>th</sup> Annual Delaware Mineral Society Show hosted by the Delaware Mineral Society. Doubletree by Hilton (next to Concord Mall) 4727 Concord Pike (Route 202), Wilmington, DE 19803. INFO: Gene Hartstein (geneatfossilnut.com)

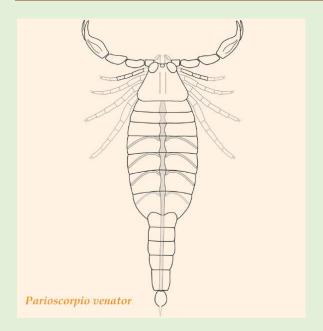
March 13-14: Leidy Microscopical Society Annual Micromount Symposium, Advent

# Fossils of Earliest Known Scorpion Discovered

Enrico de Lazaro

http://www.sci-news.com/paleontology/earliest-known-scorpion-08031.html

The exceptionally preserved fossils of the oldest species of scorpion ever found have been unearthed in Wisconsin, the United States.



Reconstruction of *Parioscorpio venator*: Structures outlined in gray are inferred based on *Proscorpius osborni*. Structures highlighted with gray infilling are the preserved elements of the pulmonary-cardiovascular system. Image credit: Wendruff *et al.*, doi: 10.1038/s41598-019-56010-z.

The newly-discovered ancient scorpion lived around 437 million years ago during the early Silurian period.

Dubbed *Parioscorpio venator*, the animal was about 2.5 cm (one inch) long — about the same size as many extant scorpions.

The creature is the earliest scorpion yet reported, and it provides new information about how animals transitioned from living in the sea to living entirely on land.

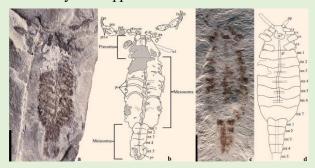
Its respiratory and circulatory systems are almost identical to those of extant scorpions and operate similarly to those of a horseshoe crab.

"Parioscorpio venator shows a crucial evolutionary link between the way ancient ancestors of scorpions respired under water, and the way modern-day scorpions breathe on land," said Professor Loren Babcock, a paleontologist in the School of Earth Sciences at the Ohio State University.

"The inner workings of the respiratory-circulatory system in this animal are, shape-wise, identical to those of the arachnids and scorpions that breathe air exclusively," he explained.

"But it also is incredibly similar to what we recognize in marine arthropods like horseshoe crabs."

"So, it looks like this scorpion, this lineage, must have been pre-adapted to life on land, meaning they had the morphologic capability to make that transition, even before they first stepped onto land."



*Parioscorpio venator* from the Brandon Bridge Formation, Wisconsin, the United States. Scale bars -5 mm. Image credit: Wendruff *et al.*, doi: 10.1038/s41598-019-56010-z.

The fossilized remains of *Parioscorpio venator* were unearthed in 1985 from the Brandon Bridge Formation, a site in Wisconsin that was once a small pool at the base of an island cliff face.

The specimens belong to the so-called Waukesha Biota, and were recovered from layers older than those from Scotland yielding *Dolichophonus loudonensis*, which was previously accepted as the oldest known scorpion.

Professor Babcock, Otterbein University's Dr. Andrew Wendruff and their colleagues examined the fossils under a microscope, and took detailed, high-resolution photographs of the fossils from different angles.

They were able to identify the appendages, a chamber where the animal would have stored its venom, and the remains of its respiratory and circulatory systems.

"We're looking at the oldest known scorpion — the oldest known member of the arachnid lineage, which has been one of the most successful land-going

creatures in all of Earth history," Professor Babcock said.

"And beyond that, what is of even greater significance is that we've identified a mechanism by which animals made that critical transition from a marine habitat to a terrestrial habitat."

"It provides a model for other kinds of animals that have made that transition including, potentially, vertebrate animals. It's a groundbreaking discovery."

The discovery is reported in a paper in the journal *Scientific Reports*.

A.J. Wendruff *et al.* A Silurian ancestral scorpion with fossilised internal anatomy illustrating a pathway to arachnid terrestrialisation. *Sci Rep* 10, 14; doi: 10.1038/s41598-019-56010-z

# Experts Observe Changes in Supervolcano Yellowstone

By Michael Benitt (staff@latinpost.com)

https://www.latinpost.com/articles/143577/20200214/supervolcano-yellowstone-could-explode-next-week-experts-say.htm



(Photo: Pixabay)

Located in Yellowstone National Park, the Yellowstone Supervolcano is one of the most popular volcanoes worldwide with its caldera being around 35

miles wide by 50 miles long. Its last explosion was recorded around 640,000 years ago.

However, just recently, a volcanologist from the University of Leicester reported that the Yellowstone Supervolcano could explode as soon as next week. This, as experts believe, would cause dramatic changes to its surroundings.

According to the geological data, the last time that the supervolcano erupted, it created the caldera of the popular Yellowstone and the Lava Creek Tuff. Ron Smith along with other scientists believed that the supervolcano is due again for another explosion.

Also, it was found out based on the data collected by the USGS that its major eruptions happened every 600,000 to 800,000 years and many scientists including Ron Smith believed that based on the time an eruption could occur next week or soon.

Ron Smith, a former University Professor, is one of the scientists who believe that Yellowstone could erupt sooner than later. In the previous report of Latin Post, he discussed during his lecture that the smoke produced by the supervolcano is not the same as of the smoke produced during a campfire. Its smoke has pieces of rocks and minerals that can damage the lungs if inhaled.

However, Smith added that it is difficult to predict the explosion of the Yellowstone, but he said during his lecture at the Dixie University in Utah that because of the current status and activity of the Yellowstone it is up again for another explosion that could probably happen next week or even another thousand years from now. His statements were also supported by other scientists.

Smith said: "Yellowstone has gotten a lot of publicity because of the severity of a supervolcano and the effect it would have on the Earth. We cannot say that Yellowstone is overdue. It is probably going to blow again but it could well be 500,000 years from now or a week from Tuesday."

Meanwhile, the US Geological Survey (USGS) contradicts the beliefs of Smith and other scientists. In a published article in International Business Times, the USGS said that the foreseeable explosion of the supervolcano is extremely low.

They also added that even if the Yellowstone will erupt, it would only cause a hydrothermal eruption and not a volcanic explosion. USGS explained that hydrothermal eruption occurs in shallow reserves of hot water and this is less explosive compared to a volcanic eruption.

Either the explosion of the Yellowstone happens next week or in a thousand of years from now, people living around it must prepare at all times. It is indeed true that there is no technology yet that will help us predict the explosion of a mountain but preparing for another explosion is better due to the current activities of the Yellowstone.

Its next volcanic explosion might not only put the lives of hundreds of people in danger but possibly the entire continent.

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# The Chesapeake Gem & Mineral Society

Presents

# Living Estate Auction of Virginia & Gary White

To be held in two auctions with Hall of Fame Auctioneer Glenn Freeman

#### **First Auction**

Date: Friday, March 13, 2020

*Time:* 7:00 pm (viewing at 6:30 pm)

**Second Auction** 

Date: Saturday, April 4, 2020

*Time:* 5:00 pm (viewing at 4:30 pm)

Cash & Checks only

**Place:** Location

Westchester Community Center

2414 Westchester Ave., Oella Md.21043

Some items to be auctioned are Gemstones, Cutting rough, Jewelry, Minerals, Fossils.

Full listing on our website

Refreshments are available.

# **Directions:**

**From the north:** Take I-695 to US 40 west (exit 15B). Turn left on N. Rolling Rd. Turn right at Old Fredrick Rd. (You will pass through 1 roundabout). Turn right on Oella Ave. Turn left on Westchester Ave. Westchester Community Center is on the right.

**From the south:** Take I-695 to Fredrick Rd. (exit 13). Turn left on Fredrick Rd. Follow Fredrick Rd. approx. 2.7 miles. Turn right on Oella Ave. Turn left on Westchester Ave.

Westchester Community Center is on the right.

<chesapeakegemandmineral.org>

The Southern Maryland Rock and Mineral Club

Meetings take place on the 4<sup>th</sup> Tuesday of each month at 7:00pm

Clearwater Nature Center, 11000 Thrift Road, Clinton, MD.

For More information, call:

(301) 297-4575

We're on the web:

