#### Southern Maryland Rock and Mineral Club



### Rock Talk



#### **JUNE / JULY 2020**

#### A Message to Members by Stephanie Jacob, Park Naturalist, Clearwater Nature Center (07/14/2020)

We are busy here at Clearwater Nature Center planning for our reopening. We do not have a set date at this time, but we have been told that some of the Park and Planning facilities will be reopening on July 20<sup>th</sup>, and others will reopen in the weeks to follow. When we do reopen, a face covering will be required and each person will have to have a reservation to enter the facility. There will be a limit to the number of people permitted in the facility and in each room.

The Nature Center staff is going through multiple training lessons to promote a "Virus Free" atmosphere during any activity that PG County Parks and Recreations is sponsoring. The ultimate opening of the Clearwater Nature Center will be a slow, ongoing effort ensuring best practices ensuring the lowest chances of spreading COVID-19 between the animals and humans.

If you would like to view the most current press

release: <a href="http://pgparks.com/CivicAlerts.aspx?">http://pgparks.com/CivicAlerts.aspx?</a>
AID=565

## So the SMRMC meetings scheduled for JULY 2020 is cancelled. (And not due to "Lack of Interest!!")

The Lapidary workshop is also closed until further notice - both because of the shutdown and due to potential delays this will cause for the turtle pond renovation. Once we get a better idea on when renovations will happen you will be updated.

#### **MINUTES**

No minutes for April/May/June 2020 meetings due to COVID-19 closure of the meeting facilities. Also there will be no minutes for the July 2020 meeting. Unfortunately "No News does not mean "Good News" in this situation.

Stay Healthy.

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2020 PROGRAMS/REFRESHMENTS SCHEDULE		
MONTH	PROGRAM	REFRESHMENTS
JUNE	MEETING CANCELED	MEETING CANCELED
JULY	MEETING CANCELED	MEETING CANCELED
AUGUST	ANNUAL AUCTION	See Below
SEPTEMBER	TBD	See Below
OCTOBER	Fossil Record of Blood by Dale G.	See Below
NOVEMBER	TBD	See Below
DECEMBER	Christmas Party	See Below

Due to the ongoing COVID-19
Pandemic, the Nature Center is **not** allowing personal food into the facility for group meetings. This and many other COVID-19 related limitations/rules/etc are being routinely reviewed in an attempt for a return to normality. The Nature Center will keep us informed on any changes to the ongoing COVID policies that PG County has instituted.

For future planning , the **ROCK TALK** will have the current year's calendar of those planned monthly programs and refreshments.

If anyone has noticed, there are many TBDs listed. These are not meant as "Surprise" events. We are in need of speakers/topics to enrich fellow members knowledge and interest. **Carol** is the current POC for this and will be **VERY** happy to have people volunteer to fill the TBDs list in the calendar. **PLEASE** help Carol smile by removing the TBDs from this table.

Any changes to the schedule will be documented in the meeting minutes (when there is a meeting) and reported in this table.

#### **Editors Comments -**

Things have been quite on the Rock and Mineral Front. I know people are doing their best to stay healthy and follow CDC and the Governor's guidelines during this pandemic. BUT, if there is a story that needs to be shared with the rest of the club members - PLEASE forward it. We have seen a good amount of news that is not uplifting to anyone. But if anyone has made an interesting find, polished/carved an interesting stone/gem - sharing those pictures can brighten many people's minds and inspire others to do more.

Just thinking... Right after I took over the duties as the Rock Talk Editor, the club has not had another meeting. Coincidence? Or something more sinister??

Request for more "Authors" -...In future editions, small (or large) articles from club members can make the Rock Talk a better reading newsletter.

## Revisiting Old Sections and making New Sections -

From the past -

"Words from the President"

New Ideas -

"Lapidary Corner" or "Jewelry Creations". Small (or large) discussions to share the different ways we approach or hobby/hobbies interest. As always, I will welcome ANYTHING that is closely related to what our club has an interest.

#### **Virginia Mineral Project Update**

Thomas Hale has been hard at work, further developing the Virginia Mineral Project. The latest step involves development of the Friends of Mineralogy –Virginia Chapter. Please see his Community Announcement, attached to this newsletter. The next meeting is planned for July 31, 2020. More information on this is in his announcement and on the website:

https://www.friendsofmineralogyvirginia.org /?fbclid=IwAR0RMk3JG5pv\_HTgHTWtJcuil8U 1qfRrc6FNN6kx-Dy2KgZyt9nLbtfPChM

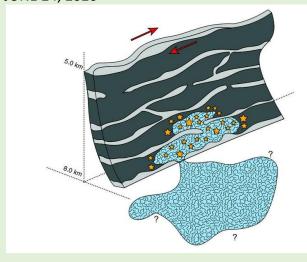
#### **AUGUST WILDACRES CANCELLED**

Due to an increase in the number of cases of the virus, the August session of Wildacres is officially cancelled. It was not a decision we wanted to make, but one we felt had to be made given the circumstances. We hope that all of you that planned to attend in 2020 will attend in 2021 and those of you who did not plan on attending that you will consider doing so in 2021. As soon as plans for 2020 are finalized, they will be published in the EFMLS News and updated on the EFMLS.org website. Steve Weinberger, Chairman of the Wildacres Committee

# Earthquake Swarm Reveals Complex Structure of a California Fault Line

In 2016, fluid broke into the cracks of a fault system, setting off a four-year-long swarm of mini earthquakes

By <u>Theresa Machemer</u> SMITHSONIANMAG.COM JUNE 24, 2020



In 2016, fluid like water or liquid carbon dioxide broke into the fault system. Over four years, it filled the cracks and set of a swarm of tremors. (Courtesy of the California Institute of Technology)

Over the course of four years, one region of Southern California experienced over 22,000 earthquakes, most too small for people to notice. Unlike classic earthquakes that arrive in one large event followed by fading aftershocks, the thousands of earthquakes under the Cahuilla Band of Mission Indians reservation were a drawn-out swarm.

Now, researchers at <u>California Institute of</u> <u>Technology</u> applied machine learning to

years of seismic data to pinpoint the source of 22,698 tremors to tease out an explanation. Based on the data, which show not only where each quake started but also when, the researchers identified a likely culprit: fluid, like water or liquid carbon dioxide, entered a complex system of cracks in the earth. As the fluid moved through the cracks, it set off the years-long seismic swarm. The research was published on June 18 in the journal *Science*.

"Swarms have been somewhat enigmatic for quite a while," U.S. Geological Survey geophysicist David Shelly, who was not involved with the study, tells Carolyn Gramling at <u>Science News</u>. "...This one is particularly cool, because it's [a] rare, slowmotion swarm. Most might last a few days, weeks or months. This one lasted four years. Having it spread out in time like that gives a little more opportunity to examine some of the nuances of what's going on."

The research team learned of the interesting seismic event in 2017 when they received an email from a citizen who had noticed a cluster of tiny earthquakes, Maya Wei-Haas reports for *National Geographic*. When they looked into the data, they realized that the swarm began a year earlier. As Shelly explains to *Science News*, swarms are most common in areas with volcanic and hydrothermal activity, and they are harder to interpret when, like the Cahuilla swarm, they aren't in those areas.

But California Institute of Technology geophysicist Zachary Ross and his colleagues had been developing an algorithm that can pick earthquake signals out of seismic noise.

"We decided to turn this loose on [the Cahuilla swarm] dataset," says Ross to *National Geographic*.

The result is a three-dimensional map of tremors as they move through the fault system. The evidence suggests that, based on the way the earthquakes spread over time, some fluid was injected into the cracks of the fault from underneath. The fluid changed speed during its travels, occasionally getting stuck behind a rocky barrier and pushing through or rushing around an obstacle.

That triggered a 4.4 magnitude quake—strong enough to be felt on the surface—in 2018 that set off a final flurry of tremors. As Ross tells *Science News*, the swarm then slowed down, but it's not over just yet.

"The detail here is incredible," University of Puerto Rico at Mayaqüez seismologist Elizabeth Vanacore, who wasn't involved in the study, tells National Geographic. "This type of work is cutting edge and really where the science is going.

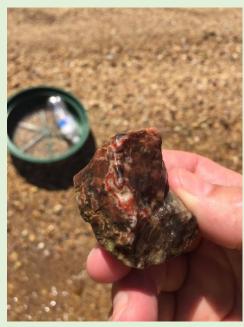
While fault lines are often explained as a large crack in the ground where two plates of the Earth's crust either meet or separate, the data show that the true story is more complicated.

"You can see that the sequence [of earthquakes] originated from a region that's only on the order of tens of meters wide," Ross tells *Science News*. But after four years, the tremors occurred over an area 30 times larger than the original zone, Ross notes. "Typically, we have very limited explanations that we can provide to the public on what's happening. It gives us something that we can explain in concrete terms."

Theresa Machemer is a freelance writer based in Washington DC. Her work has also appeared in National Geographic and SciShow. Website: tkmach.com

#### Member's Finds

**Crazy Lace Agate** found by Tim Smith along the Potomac River.





#### **Calendar of Events**

Many events have been postponed/cancelled and/or rescheduled due to the COVID-19 pandemic.

October 31, 2020 - Fairless Hills, PA - The Rock and Mineral Club of Lower Bucks County, PA and the UV Nomads of the Fluorescent Mineral present "ULTRAVIOLATION 2020" at the First United Methodist Church, 840 Trenton Road, Fairless Hills, PA., 9:00 AM – 4:00 PM, Cost \$2.00 Donation, Children 12 years old and younger FREE, Advanced reservations for dealers is advised. Come celebrate the greatest glow show on earth. Alternating light and dark periods, UV Lamps for sale, Fluorescent Mineral Displays, Door Prizes, Snacks and Beverages available. To reserve space or for more information contact Lee McIlvaine; Phone: 215-713-8020, Email: uvgeologist@yahoo.com

From: Mount Ida Area Chamber of Commerce [mailto:director@mtidachamber.com]

Sent: Monday, July 13, 2020 7:01 PM

Subject: 33rd World Championship Quartz Crystal Dig

Thank you for your past interest in the World Championship Quartz Crystal Dig in Mount Ida, Arkansas.

We've been working diligently to ensure that this event is conducted within the safety guidelines in place regarding COVID-19, and we thank you for your patience.

Good news, this event is scheduled for the weekend of September 25th and 26th, and we have attached this year's digger entry form! Registrations will be limited to the first 100 Digger Applications submitted and paid.

Please read the Digger Application form for more information, and let us know if you have any questions or need anything additional.

Thank you,

Mount Ida Area Chamber of Commerce 124 Highway 270 W. P.O. Box 6 Mt. Ida, AR 71957 870-867-2723



www.mtidachamber.com Follow us on Facebook Follow us on Linkedin



**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: SMRMC.ORG

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#### 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