Southern Maryland Rock and Mineral Club

ROCK TALK APRIL 2021

NO APRIL SMRMC APRIL MEETING

Meeting Possibilities for the Lapidary and the Rock and Mineral Clubs.

Bob Davidson has recently initiated discussions with Juan Rodriquez (new Director of the Nature Center) regarding meeting in person for both the Lapidary and Rock and Mineral Clubs. Dave Lines asked the Rock Club elected officers for their comments and received permission to represent the Rock Club in discussions with Juan.

Since COVID-19 is the key issue, Bob has recommended that both clubs require COVID vaccinations for members to meet in person at the Clearwater Nature Center. Vaccination required for members is also a good idea if we hope to have Field Trips to quarries again as the quarries are very safety conscious.

Bob spoke to Juan on Tuesday (4-13-2021) and it appears that both Juan and Kyle Lowe (Juan's boss)) are generally in agreement with more people allowed in the building if they have been tested. Juan did say that he would like to start with outdoor meetings and see how that works before moving indoors in the Fall.

Once the Parks and Recreation policy for our meetings is changed/approved to permit the clubs to meet, recommend (Editor's viewpoint) members continue to get vaccinated and maintain their vaccination card when we are able to meet this year.

Stay tuned to your email / newsletter announcements for future developments.

Bob and Dave - Thank you for your dedication to bring us all back together. By setting an example with our way ahead for meetings, we could help many other clubs.

CURRENT PARKS AND RECS POLICY

The Department of Parks and Recreation established rules for dealing with COVID. No more than eight (8) visitors (plus staff members) can be in the building at one time. Everyone must keep six feet (6') apart. Everyone must make a computer reservation before coming to the Center.

MINUTES

No minutes for the March and April 2021 meetings due to COVID-19 rules the Clearwater Nature Center must follow.

Unfortunately "No News does not mean "Good News" in this situation.

In the APRIL ROCK TALK:	
TOPIC	**PAGE**

2021 PROGRAMS/REFRESHMENTS SCHEDULE		
MONTH	**PROGRAM**	**REFRESHMENTS**
APRIL	**CANCELLED - COVID Restrictions**	None
MAY	**DEFINATE POSSIBILITY (Or Not)???**	TBA
JUNE	**MORE OF A DEFINATE POSSIBILITY**	TBA
JULY	**EVEN MORE OF A DEFINATE POSSIBILITY**	TBA
AUGUST	**Traditional Club Auction Month**	TBA
SEPTEMBER	**TBA**	TBA
OCTOBER	**TBA**	TBA
NOVEMBER	**Elections / TBA**	TBA
DECEMBER	**Holiday Party**	Pot Luck

PROGRAMS

Programs, like field trips, serve an essential part of our club. They provide an opportunity for members to share and learn from others the many facets (pun intended) of rocks, fossils, geology, and minerals.

Think about how you can contribute to a future meeting. We love to learn. Hope to see you all soon. Carole

From the Crowded and Extremely Messy Desk of the Editor:

On the Virtual Meeting Front, the next Eastern Federation Editors Unite ZOOM meeting will be 28 April. This is forecasted as the last meeting until the fall, UNLESS something of dire importance needs to be discussed, shared or put out for the better or worse of the Federation Newsletter writers needs.

Approximately twenty (20) editors across the region are expected again with the agenda in development. The last meeting Minutes are attached as a separate file. The URL below will be the site for all meeting minutes, newsletter informational help and other material necessary for the editors.
https://efmls.org/editors-united/

With the East Coast starting to warm up (thinking positive here), more chances are occurring for people to go out on their own to collect. PLEASE share pictures of your find and a short write-up where the find was, what was found and when it was done. We all would enjoy different authors writings to read . (And save me from finding articles.)

We all want to see each other and share our experiences once again. Stay in touch via mail, phone and email.

Loss of a Family Member - Joan Gamba

During these troubling times, family is everything for everyone. Earlier this month, Ralph Gamba's daughter, Joan passed away from complications with her very long battle with Huntington's Disease while at her assisted living facility. He states that when the COVID-19 restrictions are lifted, there will a memorial service for her at her church in Baltimore, MD.

Ralph, the SMRMC family grieves with you on your daughter's loss. We all know it was a long and difficult struggle that you both faced.

A Tribute To Sam Dunaway For His 80th Birthday

Dear Sam,

Your vision, with God's help and protection, made the **Morefield Mine** the most beloved destination in Virginia for Rockhounds both young and old from all over the world. From the moment 25 years ago when you and Sharon as the new owners re-opened the Morefield to the public, we could all sense a new welcoming, positive and friendly attitude that proclaimed: "We love you and want to share the bounties of this exquisite creation with everyone who comes here!"

Immediately, customers became your loyal friends who came back time after time with their families and their friends who in turn spread the word about the wonderful place in Amelia where people could find and keep beautiful rocks and minerals. Literally, thousands of children enjoyed their day trips by school bus to the Morefield --- all of whom found and took home pieces of blue green amazonite and shiny silver mica in small plastic sandwich bags. How many did you inspire to become geologists or mining engineers? How many did you infect with a lifelong hobby of rock collecting? How many now have a positive view of mines and mining as a result of their memorable day at the Morefield?

Both new and experienced mineral collectors as well as lapidary minded folks always loved coming to the Morefield because you insisted on actively mining and putting out the material from the mine's complex pegmatite for all to collect. As a result, there are countless Morefield specimens all over our country and beyond. Your underground tours of the mine were always educational and well received. You kept the mine new and exciting as you explored and expanded different levels. In short, you made the Morefield a "fun" destination.

Most importantly, we appreciate your ever bright big smile and your patient handling of many a crisis regarding the mine of which we will never know. Your deep faith and total trust in God through it all was never in doubt --- how else could you time after time have confidently driven a bulldozer into the midst of a crowd of hundreds of kids and adults ready to pounce as you spread the contents of the uplifted dozer bucket while backing away --- all miraculously done without injury?!?

The following is a partial collection of Morefield Mine articles and trip reports published in the newsletter *RockTalk* of the Southern Maryland Rock and Mineral Club. Someday when you get some time, you may enjoy reading them.

Thank you. Best regards, Dave Lines, 4-11-2021

This was written for Sam and had enclosed about 15 articles written by various SMRMC members about the Morefield Mine from past RockTalk newsletters. Ann had the pages bound into a spiral type "book" and we gave it with Sam as a birthday present. Later, after we had returned to Maryland, Sam called me and was ecstatic. Both he and Sharon loved it and talked on the phone about it for almost an hour. They especially enjoyed reading about the Morefield from our perspective (as visitors to the mine).

Calendar of Events

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

Please check with the sponsoring club to make sure the event has not been cancelled due to the ongoing Covid-19 pandemic before attending any event.

May 28-30, —SALEM, VA: Annual show; American Gem, Mineral And Jewelry Shows LLC; Salem Civic Center, 1001 Roanoke Blvd; Fri. 10-6, Sat. 10-6, Sun. 11-5; Adults $7, children age 11-17 $2, free admission for children 10 and under; Featuring vendors with gems, minerals, jewelry, beads, fossils, and meteorites; contact Alan Koch; Email: agmjs3@gmail.com

June 5-6 – MONROE, NY – Orange County Mineral Society's Annual Mineral, Gem Jewelry and Fossil Show, 10:00 AM – 4:00 PM outdoor event, rain, or shine. Museum Village, 1010 Route 17M, Monroe, New York 10950.

July 9-11 -- SYRACUSE, NY - Mark your calendars for the 2021 EFMLS Annual Meeting Syracuse, New York. Sponsored by the Gem and Mineral Society of Syracuse, New York. As the date draws nearer, more information will be forthcoming.

October 30, 2021 ULTRAVIOLATION SHOW

Where: First United Methodist Church, 840 Trenton Rd, Fairless Hills, PA

When: 9:00 AM to 4:00 PM

What: ULTRAVIOLATION is the ULTIMATE annual show for the fluorescent mineral enthusiast, whether a novice or serious collector. The show features many of the world's premier fluorescent mineral COLLECTORS AND DEALERS who strive each year to bring the biggest, brightest and best fluorescent minerals to satisfy the insatiable cravings of the fluorescent collector. ULTRAVIOLATION highlights fluorescent minerals exclusively and is the next best thing to night collecting. Free admission and a fluorescent mineral specimen for each junior mineralogist 12 years and younger when accompanied by an adult.

Admission: $2.00 Donation, Children 12 & Under Free

Dealers: 8' TABLE $30 – ½ TABLE $15 ADVANCED REGISTRATION FOR DEALERS IS ADVISED

SEND YOUR CHECK MADE PAYABLE TO:

Lee McIlvaine, 8510 Elliston Dr. Wyndmoor, PA 19038 Or Paypal electronic payment to leemcilvaine@yahoo.com

For information call Lee McIlvaine at 215-713-8020 or email uvgeologist@yahoo.com

https://www.smithsonianmag.com/smart-news/discovery-95-million-year-old-eagle-shark-fossil-makes-waves-180977285

Discovery of a 95-Million-Year-Old 'Eagle Shark' Fossil Makes Waves

The ancient creature likely used its six-foot-wide wingspan to move with 'underwater flight'

The eagle shark's long, slender side fins are one of its "most striking features," says first author Romain Vullo. (Image by Wolfgang Stinnesbeck)

By **Theresa Machemer**

SMITHSONIANMAG.COM

MARCH 22, 2021

The eagle shark was probably not as fearsome as its name suggests. The ancient shark, described on March 19 in the journal *Science*, was most likely a slow-moving filter feeder that looked like a cross between a standard shark and a manta ray. But the eagle shark lived about 95 million years ago, 30 million years before modern rays appeared in the ocean. The find has paleontologists wondering of other ancient sharks took unusual shapes, since many are known only by the teeth they left behind.

The eagle shark, or *Aquilolomna milarcae*, fossil has the opposite appearance: an entire skeleton, but no teeth were preserved that would have helped paleontologists categorize it. The researchers took signs from other aspects of its anatomy—like its broad head and wide, wing-like fins—to draw conclusions about the shark's behavior.

"As this shark probably fed on plankton, it didn't need to go fast," says Romain Vullo, first author of the new study and a paleontologist at the Université de Rennes, to *New Scientist*'s Adam Vaughan. "Like modern manta rays, relatively slow swimming was enough to eat plankton."

The eagle shark's broad head, wide fins, and lack of dorsal and pelvic fins make it look like a combination of a manta ray and a modern shark Image

A quarry worker found the unusual shark fossil in the Vallecillo limestone quarry in 2012. The region in northeastern Mexico is a well-known repository of marine fossils

like ammonites, fish and marine reptiles, according to a statement. Local paleontologist Margarito González González learned of the discovery and set to work carefully chipping away at the stone to reveal the fossil that was preserved within, Riley Black reports for *National Geographic*.

“My first thoughts on seeing the fossil were that this unique morphology is totally new and unknown among sharks,” says Vullo to *National Geographic*.

While its head and side fins are unusual, the eagle shark’s tail and tail fins resemble those of modern sharks. So the researchers suggest that the shark probably used its tail to propel itself forward and its long side fins for stabilization. Manta rays have a different strategy, flapping their wide side fins to propel themselves forward.

"One of the most striking features of Aquilolamna is that it has very long, slender pectoral [side] fins," writes Vullo in an email to Laura Geggel at *Live Science*, "This makes the shark wider than long," because it is just over six feet wide but only about 5.4 feet long.

The fossil didn’t show signs of a dorsal fin—the notorious sign of an approaching shark that sticks up above the water—or of pelvic fins, which are on the underside of the shark. It’s not yet clear whether the eagle shark lacked these fins, or if they just didn’t fossilize, per *Live Science*.

The biggest mystery surrounding the eagle shark comes from the lack of teeth in the fossil. Paleontologists rely on sharks’ teeth to identify them and figure out their evolutionary relationship to other ancient sharks. The eagle shark might have had tiny, pointed teeth like the basking shark and the megamouth—two modern filter-feeding sharks—or taken a different strategy.

“It is truly unfortunate that no teeth were preserved in the specimen that could have allowed researchers to determine the exact taxonomic affinity of the new shark,” says DePaul University paleobiologist Kenshu Shimada to *National Geographic*.

For now, the research team used the shape of the fossil’s vertebrae and the skeleton of its tail fin to classify it as a shark in the order *Lamniformes*, which includes filter-feeding sharks, mako sharks and the great white. Future fossilized finds and analysis of the eagle shark’s anatomy could help scientists understand the strange shapes of sharks in the distant past.

“There are a lot of unusual features described by these authors, and I have some reservations about some of their interpretations,” says Humboldt State University paleontologist Allison Bronson, who wasn’t involved in the study, to *National Geographic*. “Ao I would be excited to see further investigations of this new, remarkable fossil.”

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

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https://www.smithsonianmag.com/smartnews-science/unearthed-dinosaur-fossil-found-incubating-nest-eggs-180977264

For the First Time, Paleontologists Unearth Fossil of Non-Avian Dinosaur Incubating a Nest of Eggs

The find is the first evidence that oviraptorosaurs—also called 'egg thief lizards'—were nurturing to their young

The recently recovered oviratorosaur fossil found in southern China is missing its skull and part of its vertebrae, but remarkably, the nest of 24 oval-shaped eggs were well-preserved. (Shundong Bi)

By **Elizabeth Gamillo**

SMITHSONIANMAG.COM

MARCH 18, 2021

Within 70-million-year-old rock deposits located in southern China's Jiangxi Province, researchers unearthed a preserved fossil of an oviraptorosaur crouched over a nest of 24 eggs, reports Alaa Elassar for CNN. Seven of the eggs were on the verge of hatching, making this the only fossil on record to have evidence of a dinosaur brooding on eggs that still had embryonic material inside and the first hard evidence that this species of dinosaur incubated their young, reports Laura Geggel for *Live Science*. The study was published this month in *Science Bulletin*.

"Dinosaurs preserved on their nests are rare, and so are fossil embryos. This is the first time a non-avian dinosaur has been found, sitting on a nest of eggs that preserve embryos, in a single spectacular specimen," says study co-author Shundong Bi, a paleontologist at Indiana University of Pennsylvania, in a statement.

Oviraptorosaurs, a type of theropod, were feathered dinosaurs with short, small parrot-like skulls. They thrived during the Cretaceous period between 65.5 million and 145.5 million years ago, *Live Science* reports. Many of their fossilized remains are found preserved in Ganzhou area of southern China. The recently recovered oviratorosaur fossil found alongside the Ganzhou railway station is missing its skull and part of its vertebrae, but it's forearms, hind legs, and part of its tail were preserved. Even more remarkably, the nest of two dozen oval-shaped eggs underneath the adult dinosaur was also well-preserved. Each of the eggs measured 8.5 inches long and three inches across, *Live Science* reports. In seven of the eggs, researchers found bones and embryos of the baby dinos in curled positions, reports Carly Cassella for *Science Alert*.

Oviraptorosaurs, a type of theropod dinosaur, were feathered with short, small parrot-like skulls. Many of their fossilized remains are found preserved in Ganzhou area of southern China. Zhao Chuang)

The parent dinosaur was found sitting above the eggs with its forearms covering the nest. A behavior researchers suspect shows that the dinosaur was incubating the eggs for a long time, in part because the preserved eggs were almost ready to hatch, per *Live Science*.

"In the new specimen, the babies were almost ready to hatch, which tells us beyond a doubt that this oviraptorid had tended its nest for quite a long time," says study co-author and paleontologist Matt Lamanna in the statement. "This dinosaur was a caring parent that ultimately gave its life while nurturing its young."

To confirm the adult oviraptorosaurs was incubating the eggs, the researchers analyzed oxygen isotopes within the dinosaur embryos and fossilized eggshells, *Live Science* reports. The researchers found that the embryos were incubated at 86 to 100 degrees Fahrenheit, which is consistent with the parent dinosaurs body temperature, *Science Alert* reports. Adding a layer of evidence that the oviraptorid may have been sitting on the nest to keep the eggs warm, reports *Live Science*.

The fossilized find also contained gastroliths, or pebbles in the adult oviraptorosaur's abdominal region, revealing to researchers that these dinosaurs may have eaten stones to grind and digest food, reports CNN. This discovery is also the first time gastroliths were observed in an oviraptorid fossil.

"It's extraordinary to think how much biological information is captured in just this single fossil. We're going to be learning from this specimen for many years to come," said Xing Xu, a paleontologist at the Chinese Academy of Sciences, in a statement.

Elizabeth Gamillo is a science journalist based in Milwaukee, Wisconsin. She has written for *Science* magazine as their 2018 AAAS Diverse Voices in Science Journalism Intern.

Read more from this author | Follow @elizgamillo

Graves Mountain (Georgia) Rock Swap & Dig

April	October
• Friday, April 23, 2021 thru • Sunday, May 2, 2021 Limited to 50 people per day Must register at 706-401-3337	• 8 am to 6 pm, Friday, October 1, 2021 • 8 am to 6 pm, Saturday, October 2, 2021 • 8 am to 6 pm, Sunday, October 3, 2021

"You are invited to field collect minerals at Georgia's premiere mineral location!"

The caretaker in charge of Graves Mountain, Clarence Norman Jr., has announced plans to hold a three day dig and rock swap on the Mountain during April and October. He will have the mountain open to collecting from 8 am to 6 pm each day. All participants must stop at the welcome table in the Hospitality tent to sign a liability release and make a small contribution to defray the cost of opening the mountain and providing port-o-lets. There will be several golf cart type, four wheeled vehicles available to transport those participants who have trouble walking long distances. The dig will cease and everyone is expected to be off the mountain by around 6 pm each day. Participants will be allowed to park in a designated area on the mountain.

Rock Swap and Hot Food/Drinks:
Junior will set aside an area in the upper parking lot for tables to be setup for daily rock swaps. Anyone who would like to setup a table(s), please contact Junior at the phone numbers listed below. Hot food cooked on the grill, cold drinks and chips will be available for purchase on the mountain during all three days of these events.

Contact Information:
Clarence Norman Jr. (Junior) - 706-359-1544 (his business) or 706-401-3173 (his cell)

THESE DIGS ARE OPEN TO ALL

NO NEED TO SIGN-UP, JUST SHOW UP FOR ALL "ROCK SWAP AND DIGS"!

Mark your calendar and tell all your friends about these two great events!

DIRECTIONS: From Atlanta's I-285, take I-20 east to the exit for Washington, GA SR 78 (SR 10, SR 17) and turn left.

Travel north to Washington, turn right onto SR 378 and drive 11 miles to the Graves Mountain area. The entrance to Graves Mountain is on your right about 8/10 mile past the Lincoln county line sign.

-OR-

Just after you exit onto SR 78, turn right onto GA 43 and drive towards Lincolnton about 13 miles. Take a left onto GA 220 going Northwest for about 3 miles to SR 378. Take a left on SR 378 and go about 2 miles. The entrance will be on your left.

The entrance is a paved road that goes through a gate and up a hill. Please park along the access road and then proceed to the "Welcome Tent" at the end of the pavement to obtain a liability release form and to make a donation for the portable bathrooms, etc.
Graves mountain is accessible and open for mineral collecting by colleges, universities, and gem and mineral societies. Groups as small as two INDIVIDUAL mineral collectors can now reserve the mountain!

In order to gain access, (except for the two yearly "Rock Swaps and Digs") you will need to contact the caretaker, Clarence Norman, Jr (Junior) at 706-401-3173 (his business) or 706-401-3173 (his cell). Give him a call and he can reserve the mountain exclusively for your group. All of the mineral societies that come here to collect, offer the caretaker a donation for his trouble and effort in keeping the mountain open and assessable to them. Please consider what it is worth to your mineral society to be able to field collect minerals at Georgia's premiere mineral location!

Rutile, Kyanite, Lazulite, Iridescent Hematite, Pyrophyllite, Pyrite, Ilmenite, Fuchsite, Barite, Sulfur, variscite, woodhouseite, crandallite, strengite, phosphosiderite, cacoxenite, blue quartz, quartz crystals, and more!!.

These are just a few of the MANY URLs have additional outstanding information concerning GRAVES MOUNTAIN.

https://www.gamineral.org/ft/commercial/ftgravesmain.html
https://www.mindat.org/loc-3719.html
https://www.facebook.com/GravesMountainLC
https://www.gamineral.org/ft/commercial/ftgravesmin1.html
https://www.youtube.com/watch?v=UxSCHzeFGAI
https://epd.georgia.gov/sites/epd.georgia.gov/files/related_files/site_page/B-68.pdf

YOU TUBE Videos of INTEREST

You Tube has many interesting and educational videos besides people dancing on TicToc and News Broadcasts. The following recommended videos were found and are deemed highly worthy of watching. Our club members have visited a few of these locations and I know they will reflect on the validity of the video or the "small" corrections they could recommend to make the video better!! Enjoy and PLEASE share these sites with your friends!

GEOLOGY 365

https://www.youtube.com/watch?v=e8e78kVdaq4

https://www.youtube.com/watch?v=uzDeP5TazWg&t=134s

Made by the Friends of Mineralogy Virginia Chapter and others.....

Scufflin Acres -
https://www.youtube.com/watch?v=Pn7Ek6TMhTc&list=PLv0TYMG3SWpD0_EFcTDXay53Hq-mf8RDa

The Historic Rutherford Mine
https://www.youtube.com/watch?v=Y9bPMwHWNT4&list=PLv0TYMG3SWpD0_EFcTDXay53Hq-mf8RDa&index=3

Collecting Quartz Crystals in Saltville, Virginia
https://www.youtube.com/watch?v=1mR3cCiCa0o&list=PLv0TYMG3SWpD0_EFcTDXay53Hq-mf8RDa&index=4

Richmond, VA Vivianite Mineral Locality
https://www.youtube.com/watch?v=jWY2RcBS5C4&list=PLv0TYMG3SWpD0_EFcTDXay53Hq-mf8RDa&index=5

Largest Topaz in North America!? Herbb No.2 Pegmatite, Virginia
https://www.youtube.com/watch?v=ChzygQvXFBs&list=PLv0TYMG3SWpD0_EFcTDXay53Hq-mf8RDa&index=11

Minerals of Virginia
https://www.youtube.com/watch?v=YDB7vb5Dfuc&list=PLv0TYMG3SWpD0_EFcTDXay53Hq-mf8RDa&index=10

Cleaning and Preparing Mineral Specimens
https://www.youtube.com/watch?v=VM4bzwBERdA&list=PLv0TYMG3SWpD0_EFcTDXay53Hq-mf8RDa&index=9

Hawaii Mineral Collecting
https://www.youtube.com/watch?v=3FC4MmZqR4U

Virginia Mineral Classics Part 2
https://www.youtube.com/watch?v=pIi8-Xb2UZA&list=PLv0TYMG3SWpD0_EFcTDXay53Hq-mf8RDa&index=8

Network Analysis of Virginia's Mineralogical Systems
https://www.youtube.com/watch?v=2n12fUd7654&list=PLv0TYMG3SWpD0_EFcTDXay53Hq-mf8RDa&index=7

Minerals of the Allah Cooper Mine
https://www.youtube.com/watch?v=3RB3W8LnFxw&list=PLv0TYMG3SWpD0_EFcTDXay53Hq-mf8RDa&index=6

Quartz Crystals from Chestnut Ridge, Virginia
https://www.youtube.com/watch?v=NssLCNSnsfQ

Blanchard Mine, New Mexico
https://www.youtube.com/watch?v=wS0IM_YMn2o

Wulfenite: The Official State Mineral of Arizona by Evan Jones
https://www.youtube.com/watch?v=feKk7kD1nII

Mid-Ocean Ridge Basalts (MORB's)
https://www.youtube.com/watch?v=HO5OyN6Vq2Q

Colorado Gems Presentation by Brian Kosnar
https://www.youtube.com/watch?v=KoiuDBbJ2zM

Labeling Your Mineral Specimens
https://www.youtube.com/watch?v=bId35hOCOwA

21 ELEMENTS FROM THE PERIODIC TABLE

"PART DUEX"

M	**U**	**I**	**R**	**A**	**M**	**U**	**I**	**M**	**O**	**R**	**H**	**C**	**A**	**L**
V	**A**	**N**	**A**	**D**	**I**	**U**	**M**	**N**	**O**	**C**	**I**	**L**	**I**	**S**
O	**A**	**G**	**A**	**L**	**L**	**I**	**U**	**M**	**M**	**E**	**U**	**P**	**N**	**T**
S	**C**	**A**	**N**	**D**	**I**	**U**	**M**	**A**	**R**	**M**	**G**	**L**	**N**	**H**
I	**E**	**D**	**F**	**E**	**D**	**L**	**N**	**O**	**I**	**P**	**M**	**A**	**K**	**I**
M	**R**	**I**	**L**	**V**	**S**	**G**	**I**	**N**	**A**	**U**	**M**	**T**	**M**	**M**
U	**I**	**U**	**O**	**M**	**A**	**I**	**I**	**M**	**I**	**V**	**U**	**I**	**J**	**U**
I	**U**	**M**	**U**	**N**	**U**	**U**	**U**	**N**	**E**	**D**	**I**	**N**	**T**	**N**
S	**M**	**A**	**E**	**U**	**M**	**I**	**A**	**M**	**A**	**L**	**D**	**U**	**A**	**E**
S	**M**	**S**	**I**	**I**	**L**	**R**	**N**	**B**	**D**	**L**	**I**	**M**	**N**	**D**
A	**E**	**O**	**N**	**L**	**U**	**L**	**D**	**A**	**O**	**R**	**R**	**O**	**T**	**B**
T	**J**	**Y**	**E**	**L**	**H**	**H**	**T**	**U**	**M**	**S**	**I**	**B**	**A**	**Y**
O	**A**	**R**	**S**	**E**	**N**	**I**	**C**	**T**	**T**	**R**	**A**	**B**	**L**	**L**
P	**E**	**M**	**U**	**I**	**N**	**E**	**L**	**E**	**S**	**L**	**E**	**H**	**U**	**O**
B	**P**	**H**	**O**	**S**	**P**	**H**	**O**	**R**	**U**	**S**	**P**	**G**	**M**	**M**

Land of "...UM"

This month we have 21 MORE of the 103 elements from the Periodic Table to find. This makes 53 of the 103 elements from the past two months. Yes there are a multitude of elements that end in "UM". Next 50 will be harder since some of the elements are fairly long names.

ALUMINUM
ARSENIC
BERYLLIUM
BISMUTH
CERIUM
CHROMIUM
GALLIUM
GERMANIUM
IRIDIUM
MAGNANESE
MAGNESIUM
MILYBDENUM
PHOSPHORUS
PLATINUM
POTASSIUM
SCANDIUM
SELENIUM
SILICON
TANTALUM
URANIUM
VANADIUM

The Southern Maryland Rock and Mineral Club

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

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

For More information, call:

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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