

Southern Maryland Rock and Mineral Club

ROCK TALK



MARCH 2021

NATURE CENTER REMAINS CLOSED TO GROUP MEETINGS

<u>Message from Kyle Lowe</u> Assistant Division Chief, Natural and Historical Resources Division, Prince George's County Department of Parks & Recreation, Maryland-National Capital Park and Planning Commission

I know this has been a difficult year in so many ways for everyone. All the Clearwater Nature Center staff throughout COVID and the passing of Michael have shown your commitment to the center and the animals at the facility.

I want to start off by thanking Stephanie for providing a critical leadership role during this transition. She has made sure core operations at the facility continued, managed staff schedules, budgets, animal care, and endless amounts of other small details that are needed in this role. I know it added a lot of additional work to her plate and it is appreciated.

I also want to thank Patrice for her new role at CNC. I know she is enjoying the new responsibilities and always is open and flexible to get what is needed done. Patrice will also be assisting for the next month or so for two days a week at Old Maryland Farm as there are staffing shortages. CNC new Facility Director Juan Rodriguez will officially begin March 8th with orientation and on-site March 9th. I have included a short bio from Juan- see attached. I strongly believe with each of your talents along with Juan's unique experiences, CNC will see a major transformation over the coming year(s). As you will read from his bio and from the link Juan shares the same love and passion for wildlife and public education that you do.

Next Tuesday March 2nd at 9 a.m. we will have a virtual introduction on TEAMS with Juan, so I will let him tell his own story and thoughts. I know he will be here in person the following week, but it will be nice to help with the transition process. I will send out a calendar invite shortly.

Again, thanks to all the staff at CNC for your important contributions and continued professionalism every day. The hope is CNC will begin a gradual re-opening possible at the end of March or early April.

Thank You- Kyle

So the SMRMC and Lapidary Club meetings scheduled for March 2021 iscancelled. (And not due to "Lack of Interest!!")

<u>New Clearwater Nature Center Facility</u> <u>Director - Juan Rodriguez</u>

Juan Rodriguez is a zoo professional and educator with over 20 years of public engagement, visitor education and animal care management experience. Juan is coming to us from the Smithsonian's National Zoo and Conservation Biology Institute where he worked as an Animal Keeper for 16 years, most notably with the giant pandas. Juan has currently completed his duty as the Curator for Carnivores of Asia and South America, where he led a team of animal keepers in producing multiple animal births of vulnerable and endangered carnivores, as well as conducted pioneering animal health and management research. Throughout his career Juan has fostered partnerships with community organizations and high schools in the DC region, including creating the awardwinning Youth Engagement through Science (YES!) Program at the National Zoo. The Internship program provides high school students from underserved communities hands on experience working in STEM careers and to become familiarized and inspired to go into the conservation field.

Born in San Juan Puerto Rico, he moved to the mainland and relocated to Washington D.C. with his two older siblings and mother. He has a BS in Biology from George Mason University and an MS in Leadership in Museum Education from Bank Street College of Education. He also serves on the Board of Trustees for the Wild Center.

Juan lives in Maryland with his wife Tracy, a veterinarian, and their young son Alexander. To learn more about Juan see: https://torch.si.edu/2018/04/a-few-of-my-favorite-things-juan-rodriguez

MINUTES

No minutes for April, May, June, July, August, September, October, November and December 2020, January and February 2021 meetings due to COVID-19 closure of the Clearwater Nature Center. Also due to COVID-19 conditions, the March Meeting has a very high chance of **NOT** be held UNLESS we have a meeting via a "ZOOM-like" on line meeting is held. Unfortunately "No News does not mean "Good News" in this situation.

In this Issue:								
ΤΟΡΙϹ	PAGE							
Message from PG County Leadership	1							
Minutes / New CNC Facility Director	2							
Editor's Comments	3							
Upcoming Shows and Events: 2021`	4							
Rocks, Minerals, and Fossils in the News	5							
Rock Word Search	11							
SMRMC Staff	12							
Items Wanted/For Sale	12							

2020 / 2021 PROGRAMS/REFRESHMENTS SCHEDULE							
MONTH	PROGRAM	REFRESHMENTS					
MARCH	CANCELLED	Rules may change					
APRIL	DEFINATE POSSIBILITY (Or Not)???	Rules may change					
MAY	DEFINATE POSSIBILITY (Or Not)???	Rules may change					

PROGRAMS

The only programs presented in 2020 were in January and February. Greta led us in a rousing game called Box of Rocks, and Rich reinforced our well-being with Quarry Safety. Thank you Greta and Rich.

Everything else was cancelled. We hope to reschedule these programs when the Nature Center opens again. Some of these previouslyscheduled topics are:

- The Virginia Mineral Project - Tom Hale

- The Fossil Record - Dale Greenwalt

- Raw Specimen to Display Specimen - Tim Smith

- Pearls - Denise Wilson

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 Messy Desk of the Editor:

On the Virtual Meeting Front, I (in a weak moment) volunteered to attend the Eastern Federation Editors Group ZOOM meeting. Approximately twenty (20) editors across the region have connected

for the three (3) meetings so far. Items discussed have been the transmission of the Newsletters, how topics are generated and collected, computer programs used for news letter generation, historical storage and multiple other minor topics. This Group will meet initially monthly for a few months then spread the meetings out over the remainder of the year. Agendas will be generated by the attendees prior to the meeting. It has been a good discussion group and promises to continue to be an outstanding way of sharing information.

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



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 Coronavirus pandemic before attending any event.

March 27-28 – Che-Hanna Rock & Mineral Club 51st Annual Show. March 27 9:00-5:00, March 28 10:00-4:00. Wysox Volunteer Fire Company Social Hall, 111 Lake Street, Wysox, PA. Exhibits, door prizes and dealers selling minerals, fossils, lapidary and jewelry. Admission adult \$3, students \$1, under 8 free. Contact Bob 570-928-9238; website – www.chehannarocks.com.

May 28-30, —SALEM, VIRGINIA: 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 -- 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

ROCK TALK

Fossil Collecting Sites at Calvert Cliffs



One of the most frequent questions asked of the Maryland Geological Survey is: "Where can I collect fossils along Calvert Cliffs?" Because almost all of the land along the Calvert County shoreline of Chesapeake Bay is privately owned, public access is severely restricted.

Calvert Cliffs extend south from the area of Chesapeake Beach in northern Calvert County to Drum Point at the southern end of the county. Three geologic formations of Miocene age (approximately 6 to 20 million years old) are exposed in Calvert Cliffs. The layers of sediment are inclined slightly to the south, so that progressively younger beds are exposed from north to south along the cliffs. The oldest is the Calvert Formation on the northern end, progressing to the younger Choptank Formation and finally the youngest St. Marys Formation in the southern part.

The following three locations offer public access and allow fossil collecting, and then only from the beach and any blocks that have fallen from the cliffs. Collecting is not allowed from the cliffs themselves, not only to protect the cliffs but because of the very real hazard of cliff collapse. (Several people have been killed over the years for that very reason.) Collecting is usually best at low tide and after storms. These locations are listed from north to south.



CHESAPEAKE BEACH: BAYFRONT PARK

(also known as Brownies Beach). From Routes 2 or 4 in northern Calvert County, take Route 260 to Chesapeake Beach, where you turn right (south) on Route 261. Immediately after crossing a stream at the bottom of the first hill south of Chesapeake Beach, you will see a locked gate and a parking area on the left (east) side of the road. From the parking area, follow a path for roughly 1/4 mile to the cliffs. This site is accessible by foot only during low tide; at high tide, the water extends to the base of the cliffs. The exposure here is in the Calvert Formation. For your own safety, <u>do</u> <u>not dig in the cliffs</u>.

MATOAKA COTTAGES.

About 6.6 miles south of the town of Prince Frederick and 8 miles north of Calvert Cliffs State Park is the small community of St. Leonard. Watch for the road sign for St. Leonard. St. Leonard is not visible from Routes 2 and 4, but is on Maryland route 765 (the old routes 2 and 4). Enter St. Leonard and get onto Calvert Beach Road for 0.9 mile. Then turn left onto a dirt road and follow the signs to Matoaka Cottages. Although this is private property, the owners allow access to the beach and cliff area for a modest parking fee (\$3.00 per adult, \$2.00 per child under age 12). Matoaka is open for fossil hunters year round, and summer cabin rentals are also available. Call Matoaka Cottages at 410586-0269 if you need more information. Here too, <u>digging in the cliffs is not</u> <u>permitted</u>. The beach is wide enough here to allow access during high tide, but collecting is usually better at low tide.

SITE 3: CALVERT CLIFFS STATE PARK.

The entrance to the Park is clearly marked along Maryland routes 2 and 4 about 8 miles south of St. Leonard or 4 miles north of Solomons, which is at the southern tip of Calvert County. There is a hike along a service road of about 1.8 miles from the parking lot to the Chesapeake Bay. A section of Calvert Cliffs lies immediately north of the end of the trail, but cliff collapses forced the Department of Natural Resources to close the beach along the cliffs in the 1980s as a safety measure. As a result, collecting is restricted to a small beach area in the area where the service road ends. Best collecting is usually after a storm, because the supply of shells and other fossils is replenished. Low tide is a better time than high tide to look for fossils along the beach because more beach is exposed. The Park is normally open from March to mid-November. We recommend you check that the Park is open by calling Calvert Cliffs State Park (phone 443-975-4360). The mailing address is Calvert Cliffs State Park c/o Merkle Wildlife NRMA, 11704 Fenno Road, Upper Marlboro, MD 20772.

OTHER POINTS OF INTEREST: We also recommend the Calvert Marine Museum at Solomons.

- Other resources: the Guide to Fossil Teeth of the Maryland Miocene;
- See our publications office for the interactive BULLETIN 20: Miocene Fossils of Maryland on CD-ROM;

- More online fossil resources can be found on our Educational Resources page.
- Also, look at the Fossil Guy's Calvert Cliffs Fossil Page

SUGGESTED READING:

Glaser, John D., 1995, Collecting Fossils in Maryland: Maryland Geological Survey, Educational Series No. 4, 83 p.

Godfrey, S.J. (Volume editor), 2018, The Geology and Vertebrate Paleontology of Calvert Cliffs, Maryland: Smithsonian Contributions to Paleobiology, number 100, 274 pp.

McLennan, Jeanne D., 1971, Miocene Sharks Teeth of Calvert County: Maryland Geological Survey pamphlet, 8 p. (1 to 5 copies are free on request.)

McLennan, Jeanne D., 1973, Calvert Cliffs, Maryland: Maryland Geological Survey pamphlet, 8 p. (1-5 copies are free on request.)

Vokes, Harold E., 1957, Miocene Fossils of Maryland: Maryland Geological Survey, Bulletin 20, 85 p.

Compiled by the Maryland Geological Survey, 2300 St. Paul Street, Baltimore, MD 21218

This electronic version of "Fact Sheet No.10 " was prepared by R.D. Conkwright, Division of Coastal and Estuarine Geology, Maryland Geological Survey. Please send comments on this page to Dale Shelton (dale.shelton@maryland.gov)

http://www.mgs.md.gov/geology/fossils/fo ssil_collecting.html

MARCH 2021

Did an Ancient Magnetic Field Reversal Cause Chaos for Life on Earth 42,000 Years Ago?

The study links new, detailed data about Earth's atmosphere to a series of unfortunate events that occurred around the same time



The study begins with fossilized Kauri trees (pictured) that died over 41,000 years ago. <mark>Nelson Parker via University of New</mark> South Wales

https://www.smithsonianmag.com/smartnews/did-ancient-magnetic-field-reversalcause-chaos-life-earth-180977072/

By Theresa Machemer SMITHSONIANMAG.COM FEBRUARY 23, 2021 8:15AM

Humans today take Earth's magnetic North Pole for granted. But over the course of the planet's history, the direction of its magnetic field has shifted. A new study suggests that the last time the field flipped around and flopped back again, the effects on Earth's surface were cataclysmic, Carolyn Gramling reports for *Science News*.

The study, published on February 19 in the journal *Science*, makes use of massive, fossilized Kauri trees from New Zealand to

create a timeline of how cosmic rays impacted Earth's atmosphere during their lifetimes, which overlapped with a magnetic field flipping event called the Laschamps excursion. By comparing the chemicals preserved in the tree rings to atmospheric records found in ice cores and soil, the researchers drew conclusions about the magnetic field's effect on the ozone layer, as well as solar activity and space weather.

After that, the researchers laid out a series of theories about how the changes may have impacted ancient people and wildlife on Earth. The *Science* study is the first to consider a wide swath of possible consequences.

The study begins with fossilized Kauri trees that died over 41,000 years ago. One, which was discovered <u>last January</u> and delivered to Ngāwhā Marae, was the first tree found to have lived during the entirety of the Laschamps excursion, an 800-year period when the magnetic field flipped backwards and corrected itself again.

The research team analyzed levels of a radioactive form of carbon in the trees' rings. The idea is that when Earth's magnetic field is weak, cosmic radiation causes more radioactive carbon to form in the atmosphere, so it shows up in higher amounts in the tree rings. Because tree rings form with a predictable yearly pattern, they could match magnetic field strength with time. They found that during the Laschamps excursion, the magnetic field was about 28 percent of its usual strength and even weaker in the centuries leading up to this time period.

ROCK TALK

From about 41,600 to 42,300 years ago, Earth's magnetic field was only six percent of its full strength. Because this period centers on about 42,000 years ago, the researchers named the period the Adams Event after Douglas Adams, author of Hitchhiker's Guide to the Galaxy, which states that 42 is the answer to "the ultimate question of life, the universe and everything."

It would be bad enough if just Earth's magnetic field was weakened, but ice core data showed an unfortunate coincidence: during the Adams Event, the sun was also in a period of lowered activity. While that might have meant fewer solar flares, it also means that the protective shield the sun creates against cosmic rays—called the <u>heliosphere</u>—was also weakened.

With both its magnetic field and heliosphere diminished, Earth was doubly at risk from cosmic radiation, according to the study.

That would be really bad news today, given space weather's effect on <u>satellites</u> and the <u>power grid</u>. But what would it mean for life 42,000 years ago?

"It must have seemed like the end of days," says University of New South Wales geoscientist Chris S.M. Turney, a co-author of the new study, to Alanna Mitchell at the <u>New York Times</u>.

The effects may have included a thinning ozone layer, the aurora borealis approaching close to the equator, an increase in ultraviolet radiation reaching the surface, raging electrical storms, and Arctic air reaching across continents, the authors write on the <u>Conversation</u>.

They link the environmental effects to the extinction of large animals in Australia, the eventual demise of Neanderthals and humans' use of red ocher pigment for cave art and sunscreen.

"One of the strengths of the paper just from the perspective of its scholarly work, not necessarily the analytical science that it does, is just the degree to which it stitches together all of these disparate sources of information to make its case," says climate scientist Jason E. Smerdon of Columbia University to the *New York Times*.

The paper has sparked conversations among scientists about the theories it presents, and how future research might provide evidence to back them up or not, John Timmer reports for <u>Ars Technica</u>. Experts have wondered for over 50 years about whether or not magnetic field shifts affect life on Earth, but lacked clear avenues to find answers, geophysics expert James E. T. Channell tells the *Times*.

"The biggest value of the paper is that it's putting out several ideas that should be investigated further," says GFZ German Research Centre for Geosciences geomagnetist Monika Korte to Science News.

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

Read more from this author | Follow @theresakmach

MARCH 2021

February Surprise in a Box

by Dave Lines

One evening back when snow and ice had covered everything, I drove my pickup truck out our driveway to get the newspaper and the mail. When I opened our mailbox for the mail, there was also a small Flat Rate box addressed to me. Because it was cold, I went back to the house (where it was warm!) to open it.

Anyway, back in our kitchen I read the return address label on the box --- it was from a good friend Tom Pankratz who belongs to the Delaware Mineral Society. Many of you who went on our 2019 Field Trips to National Limestone quarries in Mt. Pleasant Mills and Middleburg, PA or to Chestnut Ridge or to find amethyst crystals in the Pennsylvania Amish farm field have met him. Tom was the trip organizer of many great trips.

Now Tom had sent me a box. I suspected it was something to do with an email from him that I had received just before last Thanksgiving. It seems that another Tom --- Zunio --- who is a member both of our Southern Maryland Club and the Delaware Club --- had noticed the article I had written in the November 2020 RockTalk. The article pictured some specimens of Patuxent River Stone --- with a light shining through some of them. Tom Z had emailed Tom P commenting that he was unaware that Patuxent River Stones could be found at Purse State Park. That prompted Tom P to send an email to me as follows: "pretty nice...I'd like to get a nice clear piece to work up....how about it Dave....got a nice one you'd like cut?" So-o-o I sent him some --including the one pictured in the article.

Back to the kitchen table: ---- I carefully cut open the box and inside were several taped up wads of bubble wrap and a note: "Hi Dave, Here's a few cut Patuxent stones. All came from the same stone --- the big one. I think they came out 'ok', considering Patuxent is a metamorphic quartzite. See ya, Tom --- p.s. there's 5 cut stones in here ---- keep looking until you find all."

Sure enough ---- there were 5 cut stones --- all translucent ---- 4 were faceted (an soft orange 7 mm round brilliant cut, a matching pair of lighter colored 7 mm rounds [for ear rings], a handsome salmon colored 10 mm round --- and a cabochon 14 x 20 mm that was a delicate light apricot with coral highlights. Wow! All were truly gems. I was very pleased --- and humbled --- that someone would do all this work and give the results to me. Thank you Tom!



Now the rest of the story --- Patuxent River Stone was officially designated the Maryland State Gemstone in 2004 by the Maryland Legislature and signed into law by the Maryland Governor. The rock that became the state gem had been actively promoted for several years by Courtland Lee who has a Master of Science in Economic Geology. Mr. Lee was actually a guest speaker once at our club and he described the ways he had intentionally pushed this stone into the limelight. He claimed it was an agate --- specifically agatized dinosaur bone. He went to Quartzsite, Arizona and found an old codger who swore it was exactly like agatized dino bone he had seen from the Morrison formation. Because Patuxent River Stone has a hardness of 7, it will take a great polish. So Courtland send some rough of this stone to gem carvers in China and had them make intricate carvings which he had fashioned into beautiful jewelry brooches.

He then gave these carved gemstones to all the wives of the State Legislature. He emphasized that the stone contained many of the same red and yellow colors of the Maryland State Flag. He further explained it could be found readily by rock hounds and others throughout the central and southern parts of Maryland. The Legislators loved it and they passed the bill.

He was a smart promoter. In effect, he took a common, yet obscure, rock that is available throughout the gravel deposits of Maryland and elevated it to the singular status of a State Gemstone. Courtland Lee gave significant "added value" to an otherwise ordinary rock. This is what Economic Geologists do. Let's look at the numbers: in Southern Maryland, washed local gravel sells for \$50 a ton. But tumble polished Patuxent River Stone can easily sell for \$1 or more --- per 1 ounce stone. Granted, there are not a lot of Patuxent River Stones in every ton of gravel --- but there are enough to make collecting them profitable. Just think of the rock hounds out there who specialize in collecting State Rocks. And what about tourists who want a memento from their visit to Maryland? From my limited experience, I have had good luck trading the polished stones for other mineral specimens. And I certainly would pay for cabbed or faceted or carved Patuxent River Stones --they are unique --- and pretty.

On the other hand, the designation of State Gemstone stirred up a good deal of controversy --- which may still be seen --- just Goggle it to read dozens of articles and comments that disparage and make negative remarks about Patuxent River Stone ----"embarrassing state gem" "not an agate but a metamorphic quartzite". The pushback from mineral collectors was strong --because they wanted a mineral from Maryland that was native and more glitzy --a sparkly crystal or a unique lapidary material. And the origin of the stone is definitely suspect. Patuxent River Stone is probably a cryptocrystalline quartz or quartzite that reached its present state through geologic processes. Because of the many protests, the official name was eventually changed from "agate" to "stone". Whatever its origin, this Maryland State Gemstone has lots of potential. I hope you find some and turn them into some jewels to enjoy.

	33 ELEMENTS FROM THE PERIODIC TABLE													
м	U	I .	R	Α	В	х	Α	М	U	1	S	E	С	L
I	Е	Q	U	I .	н	Y	D	R	0	G	E	Ν	В	L
0	Α	R	G	0	Ν	Μ	М	Μ	х	E	Ν	0	Ν	т
D	С	Α	С	J	К	Ν	I	т	R	0	G	E	Ν	н
I .	Α	D	F	v	D	L	Ν	0	т	Ρ	Y	R	к	I
Ν	L	I .	L	v	R	т	I .	т	Α	Ν	1	U	М	υ
E	С	U	0	W	С	Y	S	I	L	v	E	R	т	М
х	I.	м	U	м	L	Α	т	S	Е	D	С	N	I	Z
F	U	Α	R	U	0	S	R	к	Α	L	D	N	Ν	С
Ν	М	Ν	I .	I.	R	U	Α	В	D	L	R	E	В	L
E	н	0	Ν	L	I	L	D	Ν	0	R	I .	0	0	Ε
G	J	D	E	L	Ν	F	I .	G	D	Ν	н	Ν	R	К
Y	н	Α	т	Α	E	U	U	т	т	L	Α	В	0	С
х	0	R	0	G	0	R	м	U	I	L	E	н	Ν	I
0	S	0	D	I	U	м	F	С	0	Ρ	Ρ	Е	R	Ν

This month we have 33 of the 103 elements from the Periodic Table to find.

ARGON BARIUM BORON CALCIUM CARBON CESIUM CLORINE COBALT COPPER FLOURINE GALLIUM GOLD HELIUM **HYDROGEN** IODINE IRON

KRYPTON LEAD LITHIUM MERCURY NEON NICKEL NITROGEN **OXYGEN** RADIUM RADON SILVER SODIUM SULFUR TIN TITANIUM XENON ZINC

ROCK TALK

MARCH 2021



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:

(301) 297-4575

We're on the web: SMRMC.ORG

SMRMC OFFICERS PRESIDENT Sondra Fielder Sondra611@verizon.net

Program Vice President Carole Raucheison caroleal@verizon.net

Secretary Cheryl Reese <u>cheryl 59@comcast.net</u>

Field Trip Chairman David Lines Dave.lines@earthlink.net Membership Vice President Joe Davis J1964d@netzero.net

Webmaster Bob Davidson Bob.Davidson2@yahoo.com

Treasurer David Lines Dave.lines@earthlink.net

Editor Richard Simcsak sadsack56@msn.com

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