CRACK 'N CAB

Gem & Mineral Society of Syracuse, PO Box 2801, Syracuse, NY web http://www.gmss.us Volume 50 Issue 9, September 2020 209 Oswego St (Ponderosa Plaza), Unit 15, Liverpool, NY





September 21 Meeting

7:00 pm @ the Clubhouse

Induction of New Club Officers

Also: Curbside Tailgate Rock, Mineral & Fossil Swap & Sale!

Junior Rockhounds - No Meeting, but see Page 6

September is Membership month – see Membership Application and dues information, Pages 3 and 7

President's Message

Cheryl Brown



This will be my last message as president. I would like to take this opportunity to thank the wonderful officers I have served with, especially Linda Sweeney-Clark who has been

our Treasurer for at least 8 years. She is stepping down and has done a wonderful job keeping the books and keeping us on a solid financial track. Thank you, Linda!

We thought we would be able to have a catered event to replace the August picnic, but with the ongoing threat of the corona virus we decided to err on the side of caution and not have any food or beverages at the meeting. So, **the September meeting** will feature the installation of the new officers to the board and a trunk show rock swap. Bring those extra rocks and minerals to sell and cash to pick up new specimens. We just ask that you donate 15% of your sales back to the club.

The Holiday Party is in the planning stages. We will keep you posted as to details. Stay tuned!

Secretary's Report

Cathy Patterson

Executive Board Meeting Minutes

Executive Board Meeting Minutes

The Gem and Mineral Society of Syracuse meets the first Tuesday of the month at 7:00 PM at the Clubhouse in Ponderosa Plaza, Liverpool. The Board Meeting was brought to order by President Cheryl Brown at 7:00 PM. Fourteen members were present.

September Meeting

The September 21 meeting is scheduled to be held at the usual time 7:00PM and place. There will be no youth group meeting this month. All safety protocols will be observed including **social distancing and mandatory face mask wearing**. No exceptions. Refreshments will be provided by the club in wrapped packaging. No homemade treats are allowed for the time being. Tables and chairs will be

sanitized for everyone's safety. There will be no speaker at this meeting, but tailgate swapping/ selling will be in lieu of a regular program. Bring your items to swap or sell! Also, dues are due this month; \$10 single adult, \$15 couple/family, \$5 junior, \$5 life member (20+ years continuous membership).

Treasurer's Report

It is unfortunate, but true, the club is down income due to our canceling the 2020 show. We still have rent, utilities and insurance to pay despite not having meetings or show income. We Will Keep Calm and Carry On!" We thank Linda Clark Sweeney for her years of serving as club Treasurer and we welcome our new Treasurer, Mary Davis!

October Meeting

It is good to hear that Len and Susan Sharp are recovering after bouts of illness this summer. Susan will be our program speaker talking about radioactive minerals she has in her collection. They have donated books to the club on fluorescent and radioactive rocks.

Lapidary Committee

Thank you to **Steve Shorey** for opening the clubhouse Wednesdays 1:00-4:00 to allow members to work on lapidary projects. This time slot is being underused by the membership. There is a usage fee of \$5 per session. Training on the proper use and cleanup of the machinery is necessary to cut stone.

Junior Rockhounds

There will be no meeting of the youth group in the foreseeable future unless arrangements are made with group leader **Rick Moore**. The pandemic has long reaching effects on our club activities, sadly.

Hospitality

Mary Davis is in charge of arranging treats at upcoming meetings. For the foreseeable future only store bought, wrapped items can be brought to the club.

2021 EFMLS/GMSS Show

We hope the pandemic will be in the "rear view mirror" by the summer of 2021 but, no guarantees. No Show Committee meetings are planned yet. Stay tuned.

Winter Holiday Party

Arrangements are being looked into for our annual Christmas get-together in December. There are no guarantees it will be safe to have such a party this year due to the virus, but the club is being optimistic by looking at options and securing a date. Stay tuned.

(Continued on Page 3)

Facebook

We thank **Judy Cook** for keeping the cobwebs out of our Facebook presence. Look for postings she finds and shares. Well done Judy!

Internet Presence www.gmss.us

We thank **Rick Moore** for keeping us on the internet with our club website. He reminds us that if we want to see news there, we must submit it to him.

We thank all outgoing officers for serving their 2 years and we look forward to seeing our new club officers take over at the September meeting.

Incoming officers are:

Dick Lyons – President
Kris Boronczyk – Vice President
John Sweeney – Sergeant at Arms
Mary Davis – Treasurer
Cathy Patterson – Secretary (returning)
Cheryl Brown – Show Chairman

Respectfully submitted, Cathy Patterson Secretary

Letter to the Editor

PLEASE, for my Elder Safety and Others, No Macho Men (or Ladies) at Meetings, Even Outdoors

by Bob Livingston (Member since 1988)

I and others observed "ice cream night" in the parking lot, a handful of you younger guys seem to think you need not wear a mask. Or you wear it below the nose or below the chin which is worthless too. I beg you please, Wear Your Mask and Properly, to Respect and Protect Your Elders.

Fact: Unless you or I were just tested within the last day or so, we do not know if we have, or have been exposed to COVID - 19. Therein is the problem, and without ALL wearing a mask the balance of us, especially vulnerable seniors, are at 50% greater risk of contracting the virus which can be deadly to anyone over 60. So again, PLEASE for the sake of all of us attending club events, Wear

Your Mask. Plus, the majority of us wearing our mask are not protecting ourselves much, we are protecting YOU! Yes, 6 feet social distancing should be followed but with people moving about, there are many times that is not possible.

Conclusion, none of us like wearing a mask, but if you are one who will NOT wear a mask, please stay home till after we have a vaccine. Many of us "Seniors" especially wish to not be wiped out due to your attitude re this deadly COVID - 19. Thank you all very much. The Eldest Bob.

Upcoming Events

September 21 – GMSS meeting – 7:00 pm Induction of new Club officers, Tailgate Rock, Mineral & Fossil Swap & Sale.

October 19 - GMSS meeting - 7:00 pm Our speaker will be Susan Sharp. Her topic will be "Fluorescent Minerals."

September is Membership Month

Mary will be collecting dues before the meeting

Single Adult - \$10.00 Family - \$15.00 Youth - \$5.00 Life Member - \$5.00

(See Membership Application Form on Page 9)

Geo Lexis (Puzzle) By Anne Fitzgerald

"Index Fossils"

Now, more than ever, humans can look back and figure out what life on earth was like in the past.

Some of us can look back and remember when you could go to a phone booth and make a call on a dime. All of that changed when sometime between 1975 to the mid 1980's, depending on your location, the cost changed to a quarter. And in many places now, phone booths are all but extinct.

Some of us can remember when Yield signs were yellow. But all of that changed in 1971. If you think you saw a yellow Yield sign just the other day, go look again. While Yield signs were yellow for a very long time (between 1954-1971) the official color was changed to red in 1971. The yellow Yield sign is now extinct.

Now imagine you are watching an old movie and you are trying to figure out when it was made or the era it portrays. If someone asks for a dime to make a phone call, or if you see a yellow Yield sign, you can be pretty sure that movie time was sometime between 1954-1989.

And thanks to index fossils, we can get time frames and climate information and clues about our past and warnings about the future.

Unscramble the following to find index fossils or groups that may provide a home for index fossils. The solution can be found on Page 5 of this newsletter.

slibotetri

nommaties

podioscharb

slitepotrag

loracs

noidiechs

hetet

skulloms

logotlapesonsit

Wednesday Workshop

Steve Shorey has opened the lapidary workshop again on

Wednesday afternoons from 1 to 4.

If you have taken John Sweeney's Lapidary class, you can use the club equipment. The cost is \$5.00.

Are you ready to get out of the house?

You can also bring a non-lapidary project in to the Wednesday workshop from 1 to 4 as well. No charge. Just bring all your own tools and supplies.

Birthstone of the Month

The History of Birthstones

The first century A.D. Jewish historian Josephus believed there was a connection between the 12 gemstones in the breastplate of Aaron, the first High Priest (Exodus 28:15 – 21) that represented the 12 tribes of Israel, the 12 months of the year and the 12 signs of the zodiac. There is also a list of 12 Foundation Stones of the New Jerusalem in Revelation 21:19 – 20.

Over the centuries, and in different cultures, the list of birthstones changes.



© www.johnbetts-fineminerals.com Sapphire crystals from Yogo Gulch, MT



Blue sapphire from Madagascar

September: Sapphire

"A kiss on the hand may feel very, very good, but a diamond and sapphire bracelet lasts forever."

Anita Loos

(Continued on next page)

The word "sapphire" is derived from the Latin sapphirus and the Greek word sappheiros, meaning "blue stone." It may also come from the Sanskrit word sanipriya, which means "sacred to Saturn."

Ancient Persians believed the earth rested on a giant sapphire, which made the sky blue. Ancient people of Greece and Rome believed sapphires protected their owners from envy and harm. Medieval Europeans believed the gem cured plague boils and diseases of the eye. Clerics wore them because they symbolized Heaven. The gemstone has symbolized loyalty, nobility, sincerity and integrity.

Sapphire is the blue variety of the mineral corundum, composed of aluminum oxide. It can come in other colors, depending on the level of trace elements such as iron and titanium. It is found in plutonic, pegmatitic and aluminum-rich metamorphic rocks. It also occurs in sedimentary alluvial deposits.

Sapphires were found in the Kashmir region of India/Pakistan around 1881. Other historically significant sources have been Myanmar (Burma) and Sri Lanka, which has been a source for more than 2,000 years.

Some of the major current sources of this gemstone are Australia, Afghanistan, Brazil, Cambodia, China, India, Madagascar, Thailand and Vietnam. In the United States sapphires have been mined primarily from deposits found in Montana, such as Yogo Gulch.

Sapphire has a hardness of 9 on the Mohs Hardness Scale (second only to diamond). It has excellent toughness, with no cleavage, which makes it a good choice for rings and all other types of jewelry mountings that are subject to daily wear. Warm, soapy water is a safe choice for cleaning this gemstone. Because of its harness, there are other industrial uses for the mineral, including high-durability windows, watch crystals, scientific instruments and electronics.

Answers to Geo Lexis

slibotetri trilobites

nommaties ammonites

podioscharb brachiopods

slitepotrag graptolites

loracs corals

noidiechs echinoids

hetet teeth

skulloms mollusks

logotlapesonsit paleontologists

Sources: Club member Cathy Patterson one day at Rainbow Shores, NV a long time ago.

Shores, NY a long time ago. Academickids.com

https://sciencestruck.com

Alden, Andrew. "How Index Fossils Help Define Geologic Time." ThoughtCo, Aug. 28, 2020, thoughtco.com/what-are-index-fossils-1440839.

Enchanted Learning. http://www.EnchantedLearning.com 2018 https://en.wikipedia.org

In The News...

Asteroid heading towards Earth has 0.41 per cent chance of hitting planet, NASA data shows

Projection comes after NASA detects asteroid flying closer to Earth than ever before

Conrad Duncan@theconradduncan Monday 24 August 2020 09:15

An asteroid which is projected to come close to Earth later this year has a 0.41 per cent chance of hitting the planet, according to NASA data.

The Center for Near-Earth Object Studies (CNEOS), from NASA's Jet Propulsion Laboratory, said the celestial object, known as 2018VP1, is predicted to pass near Earth one day before the US presidential election on November 2.

The space agency said there were three potential impacts but, "based on 21 observations spanning 12.968 days," it did not think a direct impact was likely.

(Continued on next page)

Earlier this week, an asteroid flew just 1,830 miles over the southern Indian Ocean - the closest such an object has flown past Earth on record.

So, would it be better to vote early by mail-in ballot, or wait and see what happens, and vote in person?

Mineral Hematite Detected at High Latitudes on Moon

Sep 2, 2020 by News Staff / Source

A ferric mineral called hematite (Fe₂O₃) is present at high latitudes on the Moon, mostly associated with east- and equator-facing sides of topographic highs, and is more prevalent on the lunar nearside than the farside, according to an analysis of data collected by the $\underline{\text{Moon Mineralogy Mapper}}$ (M3) onboard India's Chandrayaan-1 mission.

"Our hypothesis is that lunar hematite is formed through oxidation of lunar surface iron by the oxygen from the Earth's upper atmosphere that has been continuously blown to the lunar surface by solar wind when the Moon is in Earth's magnetotail during the past several billion years," said Dr. Shuai Li, a researcher in the Hawai'i Institute of Geophysics and Planetology at the University of Hawaii. "More hematite on the lunar nearside suggested that it may be related to Earth," Dr. Li said. "So, Earth's atmospheric oxygen could be the major oxidant to produce hematite. Water and interplanetary dust impact may also have played critical roles."

So, we're already messing up the Moon. Next stop, Mars!

How dinosaur research can help medicine

Even Tyrannosaurus rex could have suffered a slipped disc

Date: August 24, 2020 Source: University of Bonn

The intervertebral discs connect the vertebrae and give the spine its mobility. The disc consists of a cartilaginous fibrous ring and a gelatinous core as a buffer. It has always been assumed that only humans and other mammals have discs. A misconception, as a research team under the leadership of the University of Bonn has now discovered: Even Tyrannosaurus rex could have suffered a slipped disc. The results have now been published in the journal "Scientific Reports."

I pity T rex's chiropractor.

Meteorite strikes may create unexpected form of silica

Date: August 26, 2020

Source: Carnegie Institution for Science

New work led by Carnegie's Sally June Tracy examined the crystal structure of the silica mineral quartz under shock compression and is challenging longstanding assumptions about how this ubiquitous material behaves under such intense conditions. The results are published in *Science Advances*.

"Quartz is one of the most abundant minerals in Earth's crust, found in a multitude of different rock types," Tracy explained. "In the lab, we can mimic a meteorite impact and see what happens."

Despite decades of research, there has been a long-standing debate in the scientific community about what form silica would take during an impact event, or under dynamic compression conditions such as those deployed by Tracy and her collaborators. Under shock loading, silica is often assumed to transform to a dense crystalline form known as stishovite -- a structure believed to exist in the deep Earth. Others have argued that because of the fast timescale of the shock the material will instead adopt a dense, glassy structure.

Tracy and her team were able to demonstrate that counter to expectations, when subjected to a dynamic shock of greater than 300,000 times normal atmospheric pressure, quartz undergoes a transition to a novel disordered crystalline phase, whose structure is intermediate between fully crystalline stishovite and a fully disordered glass. However, the new structure cannot last once the burst of intense pressure has subsided.

Junior Rockhounds News

Since the cancellations of in-person activities means we can't physically meet, members of the Junior Rockhounds group should contact Rick Moore (kidsrock@gmss.us) to explore online options. The hope is that we can create a safe environment to continue our learning and sharing activities.

Junior Rockhounds can get a head start on using the internet to research information about minerals and fossils with "A Beginner's Guide to Surfing for Collectors: Minerals, Fossils and the Internet."

@ https://drive.google.com/.../0B36vTY3SZH RIN2FzZ3IQZ3I5d1U/edit



Membership Application 2020 - 2021 Gem and Mineral Society of Syracuse, Inc.

501c3 not-for-profit hobby club

www.gmss.us

For Office Use Only Check #
Card #
Sent

Please bring this application to a meeting or mail to: GMSS, P. O. Box 2801, Syracuse, NY 13220 Club meetings are the third Monday of the month September to November and January to June at 209 Oswego Road, Liverpool, NY, Suite 14 and 15. (Ponderosa Plaza, behind Heid's) Date of Application: _____ Check membership type: () **Renewal** (year of first membership) () **Individual:** \$10.00 () Life Membership: \$5.00 () Youth: \$5.00 () Family Membership*: \$15.00 *A family membership is defined here as partners or single parents with children under 18 years of age as well as grandparents and their grandchildren. Email address: (please print clearly) GMSS newsletter by email □ newsletter by USPS mail Your personal information will not be shared with any other group. Name of Applicant(s) Address _____ City, State, Zip Code _____ Phone ______ Cell _____ Family Membership: Please list minor family members and year of birth (used for insurance purposes and youth activities) Members of the Gem and Mineral Society are asked to supply refreshments at a monthly meeting and to participate in club activities by serving on various committees. Please check the committee(s) you would like to serve on: □ Newsletter □ Education ☐ Library ☐ Field Trip Planning □ Hospitality □ Program Planning □ Membership □ Youth Activities □ Annual Show □ Publicity □ Website/Internet □ Housekeeping □ Clubhouse Maintenance Are you primarily interested in: □ Minerals □ Fossils □ Jewelry/Lapidary □ Other

Tell us about yourself. Please list (on the back of this sheet) your related hobbies/skills such as rockhounding or jewelry fabrication you would like the Membership Committee to know about.



Gem and Mineral Society of Syracuse P.O. Box 2801
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www.amfed.org www.amfed.org/efmls Future Rockhounds

Eight people organized the Gem and Mineral Society of Syracuse in 1951. Since that time it has grown in membership to include adults, families, and young folk. The Society was incorporated in 1969 under the same name.

The objectives of the Society are to stimulate interest in mineralogy, paleontology, and the lapidary arts. Member interests include collecting, identification, and display of minerals, gems, fossils. Members share and develop their artistic skills in jewelry design and creation.

Our monthly meetings provide social and educational experiences. Field trips give collectors chances to find specimens and enjoy the out of doors, exercise and time with old and new friends.

Meetings - 3rd Monday of the month Future Rockhounds @ 6:30 - General Meeting @ 7:30 (NO Meetings Jul, Aug, Dec) 209 Oswego St (Ponderosa Plaza) Unit 14 & 15, Liverpool, NY Visitors are ALWAYS welcome!

See online Newsletter http://gmss.us/resources/newsletter
You can also visit our facebook and flickr pages
Annual member dues
Adult \$10 • Family/Couple \$15 • Junior \$5 • Life \$5

If you would like to join or renew membership download the application form (PDF), see http://gmss.us/about/membershipform.pdf You can get a form at a meeting or send requests to GMSS, PO Box 2801, Syracuse, NY 13220 We will mail an application/renewal form to you.

2019 - 2020 GMSS Officers/Contacts

-President:

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-Vice-President:

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-Treasurer:

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-Secretary: Cathy Patterson secretary@gmss.com

-Jr Rockhounds:

Rick Moore kidsrock@gmss.us

-Membership Chair: Donna Dow

-Sgt at Arms: Ed Suchon sgtatarms@gmss.us

-GemWorld Show Chair:

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