# CRACK 'N CAB

Gem & Mineral Society of Syracuse, PO Box 2801, Syracuse, NY web <a href="https://www.syracusegemsociety.com">https://www.syracusegemsociety.com</a> Volume 53 Issue 1, <a href="January 2023">January 2023</a> 209 Oswego St (Ponderosa Plaza), Unit 15, Liverpool, NY



# Happy New Year!

# Monday, Jan. 16 Meeting Speaker: Stephen Mayer

"Echinoderms – Extinct and Living Marine Animals"

The program will survey many different classes of Echinoderms with examples from the fossil record as well as modern living forms. Stephen is the Collections Assistant at the Paleontological Research Institution in Ithaca. His research has focused on Middle Devonian paleontology and stratigraphy of the Finger Lakes region of New York State. Moreover, he has studied the taphonomy and paleoecology of Silurian eurypterids in New York and southwestern Ontario, Canada.

### Also in this issue:

"Long-Timer Advice" by Cathy Patterson – Page 3 Bob Livingston is Featured – Page 4 – 5 Check Out:

"Local Library Display" by Dale Shinneman – Page 5

Wildacres Registration is Open! See Page 5

#### President's Message

John Sweeney



Happy New Year's to all. I hope everyone had had a great holiday season. I love this time of year. The beginning of every year is always full of promise. We've made it literally through the darkest days of the year and the days are

getting longer. Everyone is usually brimming with optimism. The grey cold days of winter become brisk and who can resist the clean white palette of fresh fallen snow on a sunny day. Where are my sunglasses?

What a perfect time for a resolution or two. I'm not talking about those resolutions you end up hanging your laundry on. I thought I had a piece of exercise equipment around here somewhere? But I'm suggesting maybe a resolution that brings you closer to people and is fun. Come to as many meetings as you can and maybe take advantage of our lapidary shop. Or provide snacks for at least one meeting. Volunteer to do something at the club. Suggest a program you would like to see or present a program long or short that you think would interest people. Take part in our upcoming tutorials on setting up a case and show off what you've done at the show this summer. It's a great way to organize your collection and learn more about it as you label and research it. Think about it and see what kind of resolution you can come up with to make our organization not only more enjoyable but better.

This month's board meeting was canceled, however, the regular meeting is on the 16th (see elsewhere in the newsletter for info on our speaker) and the show committee will go on as usual. Before the regular meeting we will be having info corners on setting up cases and prepping specimens. Keep an eye out for upcoming shows. Start planning those field trips and know that spring is around the corner.

John Sweeney

#### **Secretary's Reports**

Skylar Haas

#### Monthly Member Meeting - December 2022

A regular meeting was not held in December 2022.

#### Executive Board Meeting - January 3, 2023

The meeting was cancelled by President John Sweeney. The next Executive Board Meeting is scheduled to be on February 7, 2023.

Respectfully submitted, Skylar Haas

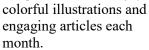
## **Long-Timer Advice**

By Cathy Patterson

I want to share with you some ideas about how to make your rock/fossil collecting more enjoyable and to make all of you more informed hobby enthusiasts. Do you

- want to learn about collecting at different sites around the country as well as in New York state?
- want to be clear on how certain rocks such as Tampa Bay fossil coral formed?
- want to be inspired to try some new lapidary projects?
- want to learn how to care for, document, and protect your prized collection?
- want to become familiar with geology terms so that you're "rock smart?"

If you say yes to any of these, I suggest you get yourself a subscription to *Rock & Gem Magazine*. You'll enjoy the



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ROCK Show
Bucket List

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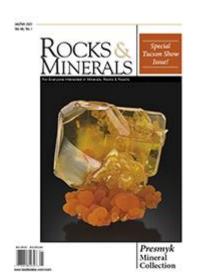
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It costs a little more than \$2 a month, a bargain! You'll want to collect all of them and refer back to past articles. I have kept many issues going back to the mid 2000's. Grab a subscription card at the next meeting or go to <a href="https://www.rockngem.com">www.rockngem.com</a>. Subscriptions for this

magazine are also offered through Amazon but at a

slightly increased rate. Could 2023 be the year you get serious about having some rock and gem fun?

Also of interest is *Rocks and Minerals* bimonthly periodical <a href="https://www.tandfonline.com/loi/vram20/">https://www.tandfonline.com/loi/vram20/</a>. This



is a larger, meatier, more in-depth mineral magazine offering color photos of minerals and collecting localities. This has had many articles submitted by folks we know like Dr. Steve Chamberlin (life GMSS member) and Mike Walters, an upstate NY collector of notoriety, who has been a vendor at our annual show, to name just two.

If you use Facebook, check out these:

- Geology Wonders
- Great Lakes Rocks and Minerals
- Amazing Geologist
- Geology Addictive

Also on Facebook (thank you Linda Adams)

- Rock Swap a site that introduces you to other rockhounds around the country and Canada that you can swap rocks with. Swap ONLY, no selling!
- **FS Hunter** for fluorescent mineral collectors
- *Crystal Swap* new from Canada also for swapping only.
- Rockhounds of Upstate New York putting you in touch with local rockhounds

Be informed. Learn from your fellow rockhounds in the GMSS. Have fun!

## Geo Lexis (Puzzle) By Anne Fitzgerald

#### "Share Your Toys and Your Finds!"

The only time I liked to share when I was a kid was when I was given candy I didn't like. I was happy to share! I was unwilling to share my toys, until they were broken. At that point I learned if I shared my broken toys with my brothers, they would fix them!

Our new "Knowledge Corners" will give club members a way to share and ask about their findings. Great discoveries happen when finders find the right people to share their discoveries with.

In October of 2022, a man named Wiley Prewitt was wandering a dried-up area of the Mississippi river when he found a large jawbone with teeth. He had the foresight to take his big find to the Mississippi Fossil and Artifact Symposium & Exhibition. The scientists there determined the jaw and tooth belonged to an American lion species that had been extinct for roughly 10,000 years. Only a few lion fossils have been found in the eastern U.S, making the find pretty rare. These lions were even bigger than today's lions. I'm guessing they had a very loud roar, or perhaps they didn't need to roar, and just meowed. (Note: For more on this story, see Pages 5-6 – Editor)

Wiley knew who to go to, and sure had his priorities straight. (There was even a sunken casino boat found in the dried-out river. I am guessing the person who found that boat could have cared less about the lion.) So, the next time you find a find, share it! Here are some word puzzles to solve. The mane idea is lions! These are common expressions.

The solution can be found on Page 4 of this newsletter.

#### <u>lioniiiiiiiiiii</u>

junaliongle zoaliono

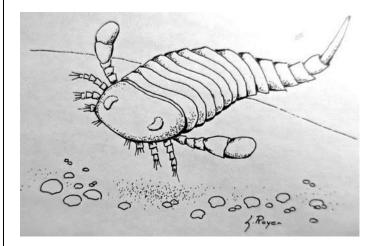
# Show Committee Meeting

January 24 7:00 Bring your thoughts and ideas

## **Upcoming Events**

# HAPPY NEW YEAR!

**JAN. 16 - GMSS meeting - 7:30 pm,** Stephen Mayer will speak on "Echinoderms - Extinct and Living Marine Animals." Stephen Mayer is from the Paleontological Research Institute (PRI), who will talk about echinoderms. Prior to the meeting Dave Millis will talk about collecting at West Pierrepont, NY Bower Powers Farm – uvite- black tourmaline. He'll discuss the dig site as well as cleaning specimens dos and don'ts. He will lead a field trip to Bower Powers Farm this spring or early summer. If interested don't miss Dave's talk. There will also be a **silent** auction. Bring a couple things to put up for bid. It's fast and easy! Program starts 7:30. Come early for interest areas and silent auction 6:30.



JAN. 24 – Show Committee meeting - 7 pm at the Clubhouse. All are invited.

**<u>FEB. 3 – GMSS Board meeting – 7 pm</u>** at the Clubhouse. All are invited.

**FEB. 16 – GMSS meeting – 7:30 pm, Chris Albrecht will speak about "Amber."** Also, silent auction (7 pm), Knowledge Corner.



Damselfly in Dominican amber, L: 4.6 cm (1½ in.). Private collection. Photo: D. Grimaldi / American Museum of Natural History.

#### **Answers to Geo Lexis**

**junaliongle** A lion in the jungle **zoaliono** A lion in the zoo

Sources and further reading:

https://www.smithsonianmag.com/smart-news/drought-reveals-rare-american-lion-fossil-in-dried-up-mississippi-river- Sarah Kuta 11/21/2022

https://www.goodnewsnetwork.org/man-finding-an-american-lion-tooth-fossil-in-a-shallow-mississippi-is-the-biggest-of-deals-toscientists- Andy Corbley 12/2/2022

## **Long-Timers – NOT Old-Timers**

By Cathy Patterson

This column will devote itself to those Long -Timers and tell you why/when we got started in the hobby and joined the Gem and Mineral Society of Syracuse, why we stay, and what we've contributed and continue to contribute. This month we feature **Bob Livingston**, affectionately nicknamed BL, from Fayetteville.

Photo by Judy Cook

Bob's hobby journey started back in 1976 when he and a work buddy decided to take the lapidary class at BOCES night school. There he learned the magic of taking an



ordinary rock and transforming it into a beautiful, shiny cabochon. Bob's "fire" was lit at that class! As a side note, OCM BOCES, 110 Elwood Dr. Liverpool offers a similar lapidary class run by John Sweeney, GMSS President. His classes fill quickly! Current class runs January 12 – March 16, 2023.

As Bob and wife Joan traveled the country to attend EFMLS and AFMS shows he collected plenty of rough which he cabbed and sometimes set for jewelry for (Continued on next page)

Joan. That's BL's main interest in the hobby.

Along the way Bob and Joan discovered Wild Acres, a retreat conference center that once a year offers lapidary classes. It is tucked away in the mountains of the Blue Ridge Parkway in Little Switzerland, NC. The week-long retreat offers classes in lapidary, faceting, silversmithing, precious metal clay, dichroic glass, intarsia, cab cutting, wire work, soapstone carving, just to name several. They sometimes also have a field trip and tailgate swap/selling. Bob and Joan attended at least a dozen sessions over the years. Think "Summer Camp" for adults! Several other club members have gone too. If interested in going you should talk to them. It is not to be missed.

Not Federation sponsored but also good is **William Holland School** in Georgia that offers in depth lapidary classes all spring, and summer.

Bob has been an active participant for years. He has held several board positions in the GMSS: treasurer, vice president, and president. He went even further to become active in the Eastern Federation serving as vice president and president of this large organization.

Over the years BL has given advice, suggestions, and admonitions when needed. He wants the GMSS to progress and thrive. Advertising was his career with Carrier Corp. He therefore was always front and center with advice for ads for our shows. BL may not actively be collecting minerals and making jewelry, but he is still very much involved in the running of the club. BL is a people person and the bond among his people is all things geology.

We Long-Timers each have a specialty in this hobby. In future columns you'll learn why we have stayed on so long, what we get out of being a member of the GMSS, why we love the hobby, and what we STILL bring to the club. Stay tuned......

# EFMLS NEWS





For more information on Wildacres' May class schedule, registration form and more EFMLS information, go to <a href="https://www.efmls.org">www.efmls.org</a>

# Local Library Display

By Dale Shinneman



Photo by Dale Shinneman

As one of the club's newest members, I've so enjoyed meetings and poking around our new surroundings for fossils, minerals and rocks. After noticing a small display case featuring pottery in the LaFayette library, I was told they were looking for a new display at the end of December. My offer of filling up the case with some of my "treasures" was accepted!

If you have an opportunity to share your "treasures" with your local library- or town office- do it! The feedback I've gotten is so very positive.

#### And, In the News...

Man Finding an American Lion Tooth Fossil in Shallow Mississippi is 'the Biggest of Deals' to Scientists

by Andy Corbley - Dec. 2, 2022 goodnewsnetwork.org



Prewitt with his tooth. credit-Anna Reginelli facebook

Locals are discovering all kinds of weird things preserved in the mud of a drought-stricken Mississippi River, but the mandible and canine of an extinct American lion may be the most astonishing.

In October, Wiley Prewitt found something black sticking out of a sandbar on a stretch of the mighty river in Rosedale, near the Arkansas border. He imagined it belonged to a carnivore—plant eaters could never need something so pointy—and took it to a Mississippi Fossil Artifact Symposium & Exhibition event that was happening nearby.

Almost all animals iconic to Africa's wild savannahs today once lived in North America. There were rhinos, mastodons, giant ungulates, and yes, lions. *Panthera atrox* has been extinct for 11,000 years but would have looked pretty much the same as African lions today.

Just 3 fossils of the great beast have been found in Mississippi, but when George Phillips, curator of paleontology at the Mississippi Museum of Natural Science, saw Prewitt's discovery, it was "one of those true moments where you blink a couple of times, because you can't believe your eyes." "This fossil is so rare, that any information learned from it will help us understand so much more about this animal, not just as a species, but about its role in the Mississippi River alluvial plain habitat during the Pleistocene," <a href="Said">Said</a> George Starnes, a state-employed geologist, who called the fossil "the biggest of deals."

Other finds <u>have turned up</u> in a shallow Mississippi River of late, including the remains of a riverboat casino, and a 100-year-old ferry, beautifully preserved in the silt.

So, check your local dried-up riverbed!

# America's Oldest Spear Points Discovered in Idaho Look Like Ones From Japan 16,000 Years Ago

by Good News Network - Dec. 24, 2022 goodnewsnetwork.org

Archaeologists have uncovered weapon points that are thousands of years older than any others previously found in the Americas. Researchers from Oregon State University have dated the "projectile points" discovered in Idaho to around 16,000 years ago. Rather than outfitting arrows or spears, they were likely attached to darts, which were "deadly" hunting weapons, despite their

small size. The 13 full and fragmentary projectile points are razor sharp and range from one-half to two inches long.



Stone projectile points discovered in Idaho - OSU / SWN

Carbon dating shows they are 3,000 years older than the Clovis fluted points found throughout North America, and 2,300 years older than the points previously found at the same Cooper's Ferry site on the Salmon River. The site is on traditional Nez Perce land (a spot known as the ancient village of Nipéhe), and the team works closely with the tribe to provide field opportunities for tribal youth and share all their findings.

"From a scientific point of view, these discoveries add very important details about what the archaeological record of the earliest peoples of the Americas looks like," said Professor Loren Davis, who led the dig. "It's one thing to say, 'We think that people were here in the Americas 16,000 years ago;' it's another thing to measure it by finding well-made artifacts they left behind." Previously, Davis's team had found simple flakes and pieces of bone at the site that indicated human presence around that time.

Even more fascinating, the points are revelatory not just in their age, but in their similarity to projectile points found in Hokkaido, Japan, dating from 16,000 to 20,000 years ago. He says their presence in Idaho adds more detail to the hypothesis that there are early genetic and cultural connections between the ice age peoples of North East Asia and North America.

Prof. Davis says the discoveries add to the emerging picture of early human life in the Pacific Northwest, adding: "Finding a site where people made pits and stored complete and broken projectile points nearly 16,000 years ago gives us valuable details about the lives of our region's earliest inhabitants." The newly discovered pits are part of the broader Cooper's Ferry record, for which the team had previously researched a 14,200-year-old fire pit and a food-processing

area. They even found the remains of an extinct horse. The scientists have found and mapped more than 65,000 items and <u>published their findings</u> in the journal *Science Advances*.

Did the spear points say, "Made in Japan"?

# Scientists Have Finally Solved a Crystal Shape Conundrum

By RICE UNIVERSITY DECEMBER 27, 2022 SCITECHDAILY.COM

THE TEAM OF RICE UNIVERSITY RESEARCHERS WAS ABLE TO SUCCESSFULLY USE THEIR VERSATILE EQUATIONS TO PREDICT THE SHAPES OF TWO DIFFERENT CRYSTALS: THE TRUNCATED RECTANGLE FORMED BY 2D TIN SELENIDE (A PROMISING THERMO-AND PIEZOELECTRIC MATERIAL) AND THE ASYMMETRIC NEEDLES FORMED BY SILVER NITRITE. THESE PREDICTIONS WERE LATER CONFIRMED THROUGH EXPERIMENTATION.

Rice theorists have developed a method that can accurately predict the shapes of crystals that do not have symmetry.

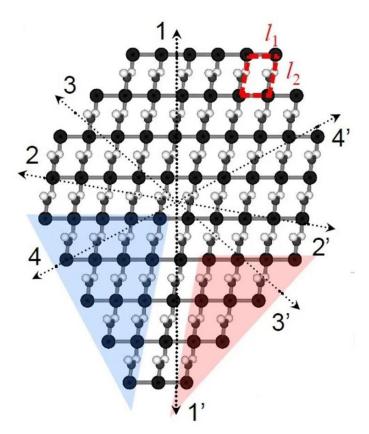
The shape of a crystal is determined by its inherent chemistry, which ultimately determines its final form from the most basic of details. However, the lack of symmetry in some crystals can make it difficult to predict their shape because the surface energies of their facets are unknown. Researchers at Rice University believe that they have discovered a solution to the problem of predicting the shape of asymmetrical crystals by assigning arbitrary latent energies to their surfaces or, in the case of two-dimensional materials, edges.

The method described in *Nature Computational Science* shows using what they call auxiliary edge energies can bring predictions back in line with the Wulff construction, a geometrical recipe in use for more than a century to determine how crystals arrive at their final equilibrium shapes. The open-access paper by materials physicist Boris Yakobson, lead author and alumnus Luqing Wang and their colleagues at Rice's George R. Brown School of Engineering introduces algorithms that employ arbitrary numbers for the right-hand factors in the equations and still deliver the proper unique shapesolution.

"The issue of shape is compelling, but researchers have been trying and failing for years to compute surface energies for asymmetrical crystals," Yakobson said. "It turns out we were falling down a rabbit hole, but we knew that if nature can find a solution through a gazillion atomic movements, there should also be a way for us to determine it."

The work could provide a valuable tool to researchers who grow crystals from the bottom up for catalytic, light-

emitting, sensing, magnetic and plasmonic applications, especially when their shapes and active edges are of particular importance.



Rice University researchers have developed a method to predict how crystals take shape from their internal chemistry, even when the crystal lacks symmetry. This representation of a silver nitrate crystal has eight edges, none of which match the others. The Rice team's algorithm was still able to predict its shape. Credit: Luqing Wang/Rice University

#### You got all that, right?



At first, the theory was that an Alabama housewife had the misfortune of being hit with a part of an airplane that had fallen from the sky, barreled through the roof

of her Sylacauga home, bounced off her radio, and hit her in the hip. The impact caused what *National Geographic* termed an ugly "pineapple-shaped bruise." The truth was stranger. In November 1954, Ann Hodges became the first person known to have been struck and injured by an extraterrestrial object. CBS 42 revisits her story, which doesn't seem to have been an entirely positive one. The bruising the meteorite caused wasn't enough to initially require hospitalization, but she eventually did end up in the hospital, including for what her husband, Eugene H. Hodges Sr., described as a "nervous breakdown."



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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 - 3<sup>rd</sup> Monday of the month Future Rockhounds @ 6:30 - General Meeting @ 7:30 (NO Meetings Jul, Aug, Dec) <u>209 Oswego St (Ponderosa Plaza) Unit 14 & 15, Liverpool, NY</u> 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 <a href="http://gmss.us/about/membershipform.pdf">http://gmss.us/about/membershipform.pdf</a> 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.

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