



The Rockhounder

April 2021

The purpose of the Gem, Lapidary, and Mineral Society of Montgomery County MD, Inc. is “to increase knowledge and popular interest in earth sciences, geology, mineralogy, paleontology, lapidary arts, and related subjects.”

NOTE: Please send any submissions for the May issue of The Rockhounder to Editor Olivia Luzier at editor@glmsmc.com by Monday, April 26th, 2021.

Regular Meeting Announcements

Ken Reynolds, Vice President

April Speaker Information:

Title of Talk: “The Day the Dinosaurs Died”

Speaker: Don Peck

Don Peck will present his talk, “The Day the Dinosaurs Died.” Don is the author of *Mineral Identification: A Practical Guide for the Amateur Mineralogist*, a daily contributor to MINDAT.ORG’s mineral identification activities, and a retired science educator who taught geology at the University of Connecticut and Fairleigh Dickenson University. His personal objective is to stop scientific illiteracy.

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Next Regular Meeting:

Date: April 12th, 2021

Time: 7:30 PM

Place: Virtual (online Zoom meeting)

Next Board of Directors Meeting:

Date: April 19th, 2021

Time: 8 PM

Place: Virtual (online Zoom meeting)

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President's Message

Holly Heighes

I recently visited America's Stonehenge in Salem, New Hampshire. I'm not quite sure what to make of it. The site is claimed to be dated to 2000 BC (through carbon dating of charcoal) and is purportedly an astronomical calendar. There appear to be some large glacial boulders, many tons of rocks strewn about, lots of stone walls, caves, and various other structures. Clearly the hand of man was at play, but from what time period? A twentieth century owner looking to make a profit? Native Americans? Earlier? The site is so vast and there are so many rocks all over the place that I would think it wouldn't be hard to find some that lined up with the equinox and many of the stone walls look 'newer' when cursorily compared to those in my yard.

Skeptical though I may be, it is a site that gets people talking about many periods in history and science, as rocks always seem to do wherever and whatever they are.

Our speaker this month, Don Peck, will also be talking about history and geology furthering his personal mission to increase scientific knowledge. I look forward to hearing what he has to say and hope to see many of you on the meeting call.

If you wish to learn more about America's Stonehenge, there is a video on their website: <https://www.stonehengeusa.com/>.

Photo Credit:

^{1,2} Tour Guide Map provided by visitor center



"Summer Solstice Monolith – lines up with the summer solstice sunset at this latitude approximately 4000 years ago."¹



A small section but typical of the vast site, comprised of many stone caves and rock walls.



"...excavations found stone and bone pendants in here."²



GLMSMC Regular Meeting Minutes from March 8th, 2021

Jeff Cessna

The March 8, 2021 meeting was called to order by President Holly Heighes at 7:47 PM. There were approximately 39 people in attendance. The meeting was conducted online.

A motion passed to approve the minutes of the February 8, 2021 regular meeting, amended to correct the date of the prior Board of Director meeting minutes from January 11th to January 18th. A motion passed to approve the minutes of the February 15, 2021 Board of Directors meeting. A motion passed to approve the minutes of the additional February 21, 2021 Board of Directors meeting.

President: President Holly Heighes welcomed members and guests. Holly thanked Dr. Jeffrey Post for offering his upcoming presentation. The club has purchased insurance independent of the EFMLS to better cover our property and field trips. The club has subsequently withdrawn from EFMLS. Hope was expressed that the EFMLS return to normal functioning. Rejoining may be considered in the future.

Treasurer: Jonathan Harris delivered a Treasurer's Report. Income since the last report included membership payments. Upcoming payments include the Post Office box and the insurance. The property manager requested the trailer storage be paid.

Membership: Doug Baum thanked those who had already sent in their membership payments. The memberships expired on Dec 31st. He provided contact information for those with questions about joining the club. Doug asked guests to introduce themselves. Some former members and members of other local clubs did so.

Program: Vice President Ken Reynolds introduced our speaker for the evening, Dr. Jeffrey Post, mineralogist and Curator-in-Charge of Gems and Minerals at the Smithsonian National Museum of Natural History. The talk was entitled "Jeff's Journal Unearthed from C to MnO₂." Since Jeff's last in-person presentation, at our club last March, the museum has been closed to the public with limited access for the staff. Just before closing, all the display were fully cleaned. Jeff gave an update on some new acquisitions. When the museum opens again, a promised special display will arrive. The time working from home gave Jeff the opportunity to revisit, research, and complete an ongoing project: A new book, *The Smithsonian National Gem Collection—Unearthed: Surprising Stories Behind the Jewels*. His work updates information from the 1997 publication on the collection and includes stories of who owned them and how they came to the collection. Jeff credited the efforts of our own Holly Heighes in digitally organizing the information about the collection, thus enabling him to complete

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GLMSMC Regular Meeting Minutes from March 8th, 2021

Jeff Cessna

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the book, especially while out of the museum. Jeff also told us tales from the dark (in color) side of mineralogy – manganese oxides. New equipment has allowed more research into these minerals that are ubiquitous in the environment. He discussed their structure and the evidence of their formation as biominerals. Examples were studied from our beloved localities, such as Medford Quarry and Sterling Hill. The finish was a series of wondrous photos of manganese oxides under SEM. Thanks, Jeff.

Show Table: A suggestion for the show table was to bring your minerals that have manganese in them. Those with items to present were asked to provide the information in the chat to facilitate inclusion in the minutes.

- Joel Rosen showed a rhodochrosite crystal from Sweet Home Mine, Colorado.
- Ken Reynolds showed a sussexite with sparkling calcophanite from Sterling Hill, NJ, and a bladed rhodonite from Franklin, NJ.
- Jeff Cessna showed an axinite (Mn)/willemite (fluorescent red and green) from Franklin, NJ, and a rhodonite, willemite, calcite, from Franklin, NJ.
- Doug Baum showed a rhodonite and manganese sphere from Madagascar.
- Dee Weiss showed obsidian with interesting swirl pattern from a box of material from South Dakota.
- Gary Leaman showed a brucite from Pakistan purchased for its yellow color. Diane Leaman showed a colorful Ammolite from Alberta, Canada.
- Jonathan Harris showed self-collected dendrites from Gettysburg Quarry, Medford Quarry, and Sterling Hill.
- Jen Wingard showed a cuprite from the hard to pronounce Rubtsovsk Mine, Altai Krai, Russia, and a rhodonite bead bracelet with nice veining.
- Pam Ogasawara showed a large crinoid plate from Madagascar.
- Juan Proaño showed a crystalline rhodochrosite from Peru.

Adjournment: It was M/S/P to adjourn the meeting at 9:47 PM.



GLMSMC Regular Meeting Minutes

There was no Board meeting for the month of March.

How to Pay Your 2021 Dues

Doug Baum

How to pay your 2021 GLMSMC dues, if you have not already:

- 1) \$20 for Family and \$15 for individual membership.
- 2) Send check made out to GLMSMC to Doug Baum, 11205 Golden Meadow Court, Germantown MD 20876.
- 3) If you send a self-addressed stamped envelope, I will mail your Membership Cards.
- 4) Any questions? Email Doug Baum at DBaum18@aol.com.

Thanks,
Doug Baum

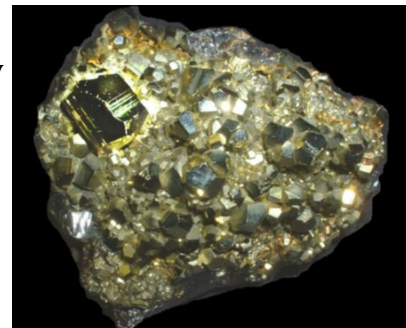
Pyrite

Don Peck

Editor's Note: This piece was provided by Dan Kohn and comes from the "Mineral Of The Month" column by Don Peck, life member of the New Jersey Mineralogical Society.

Have you watched children and non-collectors at mineral shows? They seem to gravitate to pyrite specimens. Is it the glitter . . . or the similarity to gold? In any case, this almost ubiquitous mineral is an eye-catcher.

Pyrite is an iron sulfide, FeS_2 , and crystallizes as cubes, pyritohedrons (aka pentagonal dodecahedrons), and sometimes octahedrons. It belongs in the isometric crystal system and the diploidal crystal class. The diploidal faces are almost never seen. They appear as a pair of faces pitching to the side from the center of the pyritohedral faces. Pyrite often occurs massive or granular.



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Pyrite (Cont'd)

Don Peck

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The symmetry of pyrite is lower than that of a cube. Whereas one can turn a cube through 90o angles and see it occupy the same space (or see the same view) four times in one rotation, the angle is 180o with the pyritohedron and it occupies the same space only twice. Most pyrite cube faces show striations that are mutually perpendicular on adjacent faces. The striations prove to be parallel to the long edges on the pyritohedron, thus there is only two fold symmetry in a single rotation, even for the cubic habit.

Pyrite is known as “fools’ gold”, having a brassy yellow color that resembles gold. But its Mohs hardness of 6 to 6½ vs. gold’s 2½ to 3 and its black streak compared to the gold streak of gold easily differentiate them. Pyrite has a specific gravity of 4.8 to 5.0 which makes it about five times heavier than water, about twice as heavy as most common rocks, but only ¼ as heavy as gold. It has no cleavage and is not attracted even to the strongest of magnets. Pyrite weathers to produce limonite. Limonite pseudomorphs after pyrite are fairly common.

Pyrite is found in almost all geological environments but especially in hydrothermal deposits. Well known U.S. localities are Chester, VT; Franklin, NJ; French Creek, PA; Butte, MT; Leadville, CO; Bingham, UT, and the Magma Mine, Superior, AZ. Ambasaguas, Logrono, and Navajun, Spain produced excellent specimens. So have Huanzala, Huanoco, Quiruvilca, and San Cristobal in Peru. The list could go on . . . and on . . .and on.

Future Rockhounters of America (The MOCKS) Ages 10-15

Mark Dahlman

Next Meeting Date: Time will tell

Meeting Time: 7:45-9:00 PM, when we’re back in action

Meeting Location: Sunroom Cafeteria at the Rockville Senior Center

Continuing our Fossil badge, one of the badge activities is to learn about fossil names. The San Diego Natural History Museum has a very interesting website about dinosaurs: <http://archive.sdnhm.org/kids/dinosaur/index.html>. Check out the section on finding fossils so you’ll be ready to unearth your own!

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Future Rockhounters of America (The MOCKS) Ages 10-15

Mark Dahlman

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Don't forget to email me how your favorite fossil name came about and what it means, or send me a new dinosaur name built around the name of our society (Gem, Lapidary, and Mineral Society of Montgomery County, MD) or your hometown (which can be one of three activities needed to earn the Fossils badge– see March Rockhounder article).

I'd love to see pictures of your rock ornament (see December's article), or your collection showing off your fossils, which is another badge activity (see the October article), as well as any interesting fossil-related web links to share with the group. My email address is shown below.

For more information on the Future Rockhounds of America program, please contact Mark Dahlman at <fra_advisor@glmsmc.com> or 301-428-0455.

The Spinels

Don Peck

Editor's Note: This piece was provided by Dan Kohn and comes from the "Mineral Of The Month" column by Don Peck, life member of the New Jersey Mineralogical Society.

The spinels are a group of minerals that crystallize as octahedrons. They have eight equilateral triangular faces and resemble two square pyramids set base to base.

Typical spinel groups include (strangely) the spinel group, the magnetite group, and the chromite group. They are double oxides with the general formula AB_2X_4 . In the spinel group B is aluminum; the magnetite group B is iron; and in the chromite group B is chromium. A may be divalent zinc, iron, manganese, or magnesium. X is oxygen.

Franklinite may have divalent zinc, manganese, or iron in position A (always some manganese); and trivalent iron or manganese in position B (iron predominating). To which of the three groups does franklinite belong?

(Magnetite Group)





Upcoming Events

2021 Mineral Treasures Show

Date: Saturday, May 8, 10 am—6 pm

Location: Picnic Grove at St. Michael Byzantine Church, 203 Jacob St., Mont Clare, PA 19453

Admission: \$5 adult; under 13 and all scouts in uniform free

Minerals, gems, and fossils for sale, with vendors under the Pavilion and on the grounds

Free parking

Kids' activities & free mineral specimens

Snack bar

Picnic tables available -- bring your own picnic

Indoor bathroom facilities

Information: www.phillyrocks.org.

Contact: Karenne Snow, mineral.fossils.rocks@gmail.com

1st Annual *SUMMER* South Jersey Gem, Jewelry, Mineral & Fossil Show

Date: June 12, 2021

Location: 1721 Springdale Road Cherry Hill, NJ 08054

Show Times: Saturday (6/12/21) 10:00 am - 5:00 pm (Saturday Only) (Outdoor Only)

***Rain Date:** Sunday (6/13/21) 10:00 am - 5:00 pm (Outdoor Only)

Website: www.sjmineralshow.com

Facebook: www.facebook.com/sjmineralshow



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Society Address: Gem, Lapidary, and Mineral Society of Montgomery County MD., Inc.

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Award Winning Bulletin
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