The Mineral Minutes

Volume 79-02
February 2021

Zoom Meetings Continue

Please connect to our February program at our usual time and date: **Wednesday, February 3, 2021** at **7:30 pm Eastern Time**. You should receive a link in an email from the MSDC Treasurer, John Weidner. If you do not, please email John (jfweidner42@ gmail.com) and he will send you the link.

February 3, 2021 Program: "The Universe in a Micro Box" by Mike Seeds

by Yury Kalish, MSDC Vice President

Our presenter in February will be Mike Seeds, Emeritus Professor of Astronomy at Franklin & Marshall College, in Lancaster, Pennsylvania. He has enjoyed minerals since childhood, and his wife and daughter joined him in the family hobby of geology and minerals. Mike is past president of the Baltimore Mineral Society and has been editor of the club newsletter for over 10 years. He has written over 100 articles about micromounting called Shoebox Adventures which have been reprinted in club newsletters around the world.

Mike's presentation is entitled "The Universe in a Micro Box." Hydrogen and helium atoms were made in the big bang, but where did all of the heavier elements come from? They were cooked up in stars and, in some cases, blasted into existence in cataclysmic explosions called supernovae. Mike Seeds combines his experience as an astronomer with his love of minerals to trace the different ways stars have made the atoms in minerals and in our bodies. The iron in our blood and in our pyrite crystals exists because dead stars called white dwarfs explode in supernovae and blast newly formed atoms into space. Mike's talk is illustrated with photos of exploding stars and beautiful minerals.

Sharing Time

by Dave Hennessey, MSDC President

In honor of the big Tucson, Arizona show that is normally held in February but is cancelled this year because of the pandemic, why don't we give the nod to Arizona minerals for our sharing time this month. Arizona is a treasure house for mineral collectors and it is a rare collection that does not included something wonderful from this state. If Arizona is not your cup of tea, please share something else that gives you pleasure. Any specimen you find worthy of your admiration, we will enjoy too.

Issue Highlights:

Prez Says…

by Dave Hennessey, MSDC President

The need to self-isolate during the pandemic has provided an opportunity for me to spend more time with my mineral collection. As it became obvious that staying home was the smartest thing to do, I resolved to sort through every shelf, every drawer, and every box with

(continued on p. 2)

("Pres Says…" continued from p.1)
the goal of culling out less compelling pieces and thinning out my collection to place on display only the most special, most beautiful pieces. Sort of a Marie Kondo approach keeping only what gave me joy. This approach, I reasoned, would improve the overall quality of the minerals on display and I would not need to get more display cabinets.

I enjoyed every minute re-engaging with minerals that I had not seen in some time because they were hidden away in boxes. I found a truly gorgeous green tourmaline (elbaite) from Paprok, Afghanistan that now sits on my shelf of pegmatite minerals. This is one of my display shelves on which minerals are not organized by chemical composition. This shelf represents minerals that formed in a specific geological environment, the final stage of magma's crystallization. Some other shelves represent minerals classified by their chemistry. I have many shelves of carbonates, three just for calcites, another for the copper carbonates, malachite and azurite. Other shelves are organized by locality. I have a shelf of minerals from the Deccan Plateau in India – beautiful striking green apophyllite, deep blue cavansite, and a variety of zeolite minerals (stilbite, natrolite, scolecite). Another shelf is all minerals from the mines of Panasqueira, Portugal (dynamite apatite, ferberite, and arsenopyrites). Two full cabinets are devoted to minerals just from our local northern Virginia traprock quarries. And so on.

At this point in time, I have figured out two things. This is a job with which I will never be done, and that's okay because it's not the destination, it's the journey. It gives me a lot of joy. Take that, Marie Kondo. Oh, and there is a third thing I figured out. I'm going to need more display cabinets.

January 2021 Business Meeting

by Andy Thompson, MSDC Secretary

Summary: Vice President Yury Kalish, pinch-hitting for President Dave Hennessey, called the Zoom meeting to order, welcomed all members and guests and thanked everyone for joining us. For their service to the club, he thanked two MSDC's past presidents who were attending.

Yury gave a special thanks to MSDC's new newsletter editor, Ken Rock and applauded his first issue published in early January. Ken invited any and all interested persons to submit articles for publication in future editions and reminded people of his email address from which he sent everyone the January edition of the newsletter.

Yury asked for a motion to approve the business minutes summary of the club's December meeting, as published in the January edition of the Mineral Minutes. With no changes needed, a motion to accept was made and seconded and the motion was passed.

Treasurer's Report: Treasurer John Weidner then reported on the club's finances by saying at this time, the club had 17 paid members. Individuals wishing to renew should send their $20 check to John at his home address found in the newsletter ($25 for family membership). December and January are the traditional months for renewing.

Dues Reminder!

Geology in the News: Bob reported volcanic activity in Hawaii. Jeff reported official authorization of the name "Kernowite" for an arsenate mineral, having a green color, so named because it was first discovered in a mine in Cornwell, England. In the Cornish language, "Kernow" is the name for that south-west peninsula of the United Kingdom.

Old Business: Yury said he had no knowledge of any old or new business concerns needing to be considered. With none raised by the attendees, Yury asked for and received a motion, unanimously approved, to close the musiness meeting portion of the evening.

Hope Diamond Featured on the Today Show!

On December 28, 2020, NBC's TODAY show featured a wonderful story about the Hope Diamond. The feature begins with the story about how the diamond got to the Natural History Museum from New York and then cuts to an interview with Dr. Jeff Post, Curator (and our speaker from December), about the world's most famous gem.

You will enjoy!

https://www.youtube.com/watch?v=YtQyhVAIo7M

Are you Curious about the EFMLS?

MSDC is a founding member of the Eastern Federation of Mineralogical and Lapidary Societies (EFMLS) **https://efmls.org**. As shown on its website, the EFMLS "was organized in the 1950s as a nonprofit to bring about a closer association of mineral societies devoted to the study of geology, minerals, earth sciences and the practice of lapidary arts and related crafts in the eastern portion of the United States." MSDC gets its insurance is through the EFMLS, a critical benefit for the club when visiting private mine locations. The EFMLS also hosts instructional workshops each year at Wild Acres Retreat in North Carolina, as well as an annual convention that affiliates may send two voting members to. EFMLS also maintains an extensive library of slide programs (which are being converted to JPEG) that are available for loan to affiliate clubs.

(Many thanks to the Presidential Gem & Mineral Society for input to this item).

Have you Checked out MSDC's Facebook Page?

If you are on Facebook, you can easily check out our group's postings. The group name is **Mineralogical Society of the District of Columbia** and is open to anyone. To become part of the group, simply search for the name in the search field in the Facebook application and send a request to join. One of the group administrators will review and approve your request.

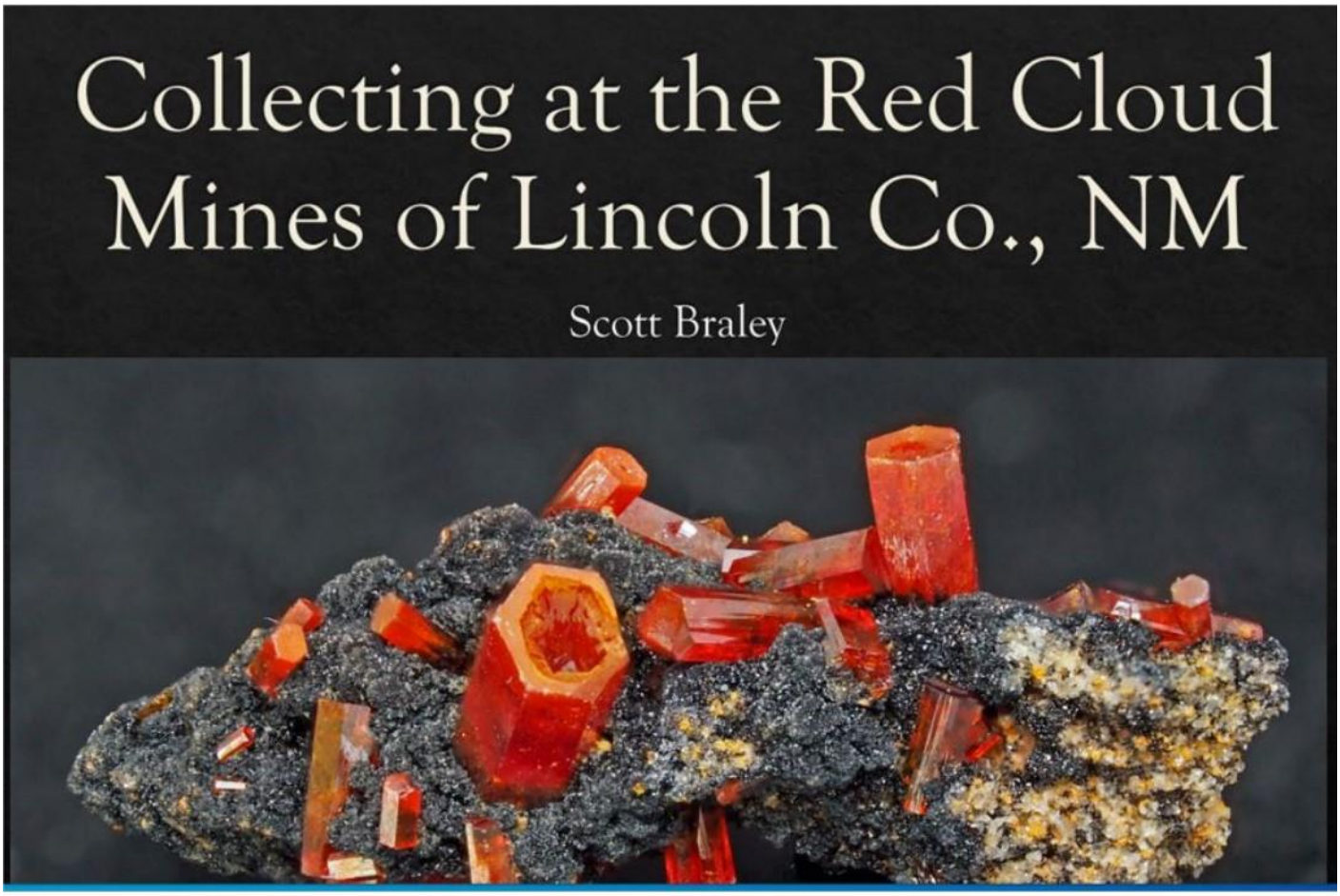
www.facebook.com/MineralogicalSocietyOfTheDistrictOfColumbia

If you are not already on Facebook, you can easily create an account. You do not have to disclose any private information – you control what you share. You do not even have to send or accept friend requests! You can just enjoy the pages related to gems and minerals, such as Amazing Geologist, RockHounds, Virginia Rockhounding, Maryland Rockhounds, The Rockhound Collection, Virginia Minerals, Franklin-Ogdensburg Mineralogical Society {FOMS}, Tucson Gem and Mineral Society, Inc., RockHounds, Virginia Rockhounding, Maryland Rockhounds, and many, many others!

(Many thanks to the Presidential Gem & Mineral Society for input to this item.)

January 6th MSDC Program Presentation by Scott Braley

Synopsis by Andy Thompson (Secretary)



Scott Braley shared his interest in a wide range of minerals including radioactive rocks, fluorescents and micros, with the latter being the evening's focus. His passion, he noted, was collecting any specimens he can find on field trips. An Assistant Professor at Northern New Mexico College, he teaches radiation protection in the Biology, Chemistry and Environmental Science Department. He said he was not a geologist and left unsaid that his wide-ranging academic and professional training includes degrees in architecture, civil engineering, nuclear engineering and most recently, a Ph.D. in radiation protection earned at Colorado State University.

Two Red Cloud Mines

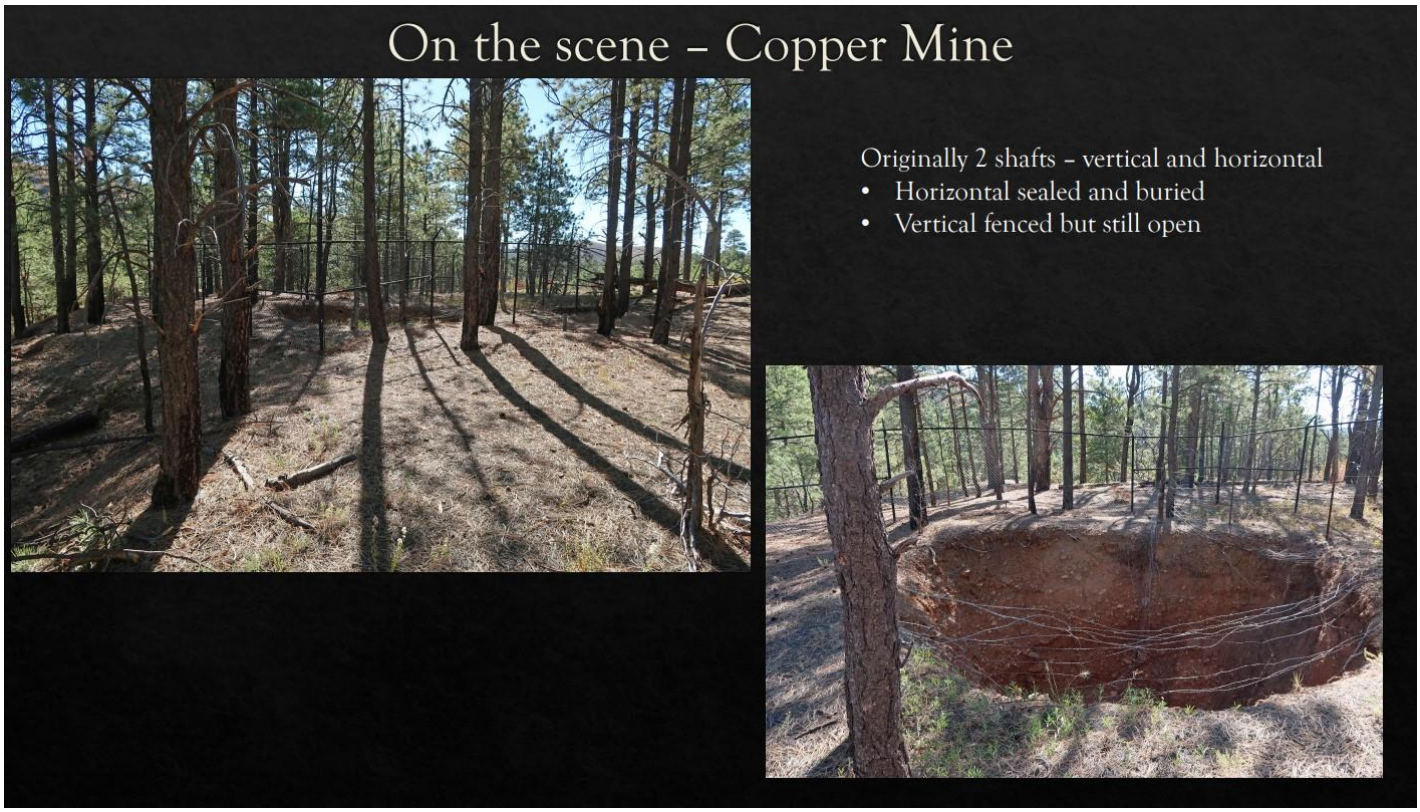
For his presentation, Scott focused on the minerals collected from the Red Cloud mines of Lincoln County, NM. The Red Cloud mines are located in the Gallinas Mountains, a small, isolated range in central New Mexico. The two mines have similar geological characteristics in that most of the exposed rock in the area is fractured Permian sandstone (250-300 MYA) with fluorite-copper-bastnäsite intrusions dating to the Paleogenic (formerly Tertiary 30 MYA). The copper mine, he said, is located in and on deposits of copper, rare earth elements and fluorite which precipitated from ancient hydrothermal veins. The nearby fluorite mine is in and on deposits of rare earth elements and fluorite, similarly precipitated from hydrothermal veins but lacking copper deposits. He noted, as indicated in the arial photograph on the next page, the two mines are next-door neighbors separated by only about 100 meters.

Both mines are tiny by industrial standards. The copper mine operated sporadically from 1900 to about 1955 and the Fluorite mine was worked from 1941 through 1955, extracting both fluorite and bastnaesite. Scott discussed first the Red Cloud Copper Mine.

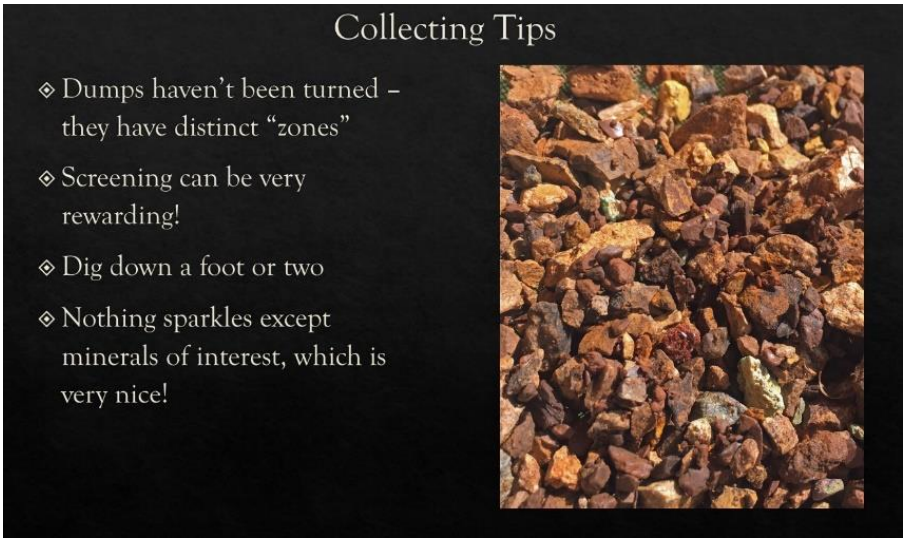
The Red Cloud Copper Mine

Scott began his presentation about the Red Cloud Copper Mine by describing its physical layout and his favorite collecting spots indicated by the arrows. He provided two photos of each entrance, the first being a now collapsed entrance initially tunneled horizontally into the hillside, shown from two perspectives.

The second entrance to the Red Cloud Copper Mine, shown below, was a vertical shaft, again, pictured from two perspectives and clearly showing a wide open and fenced off pit.



►Despite the small size of this mining operation and the unimpressive looking tailings (or "dumps") shown in Scott's photo at right, he provided some encouraging tips to help collectors discover minerals, especially of the micro variety.



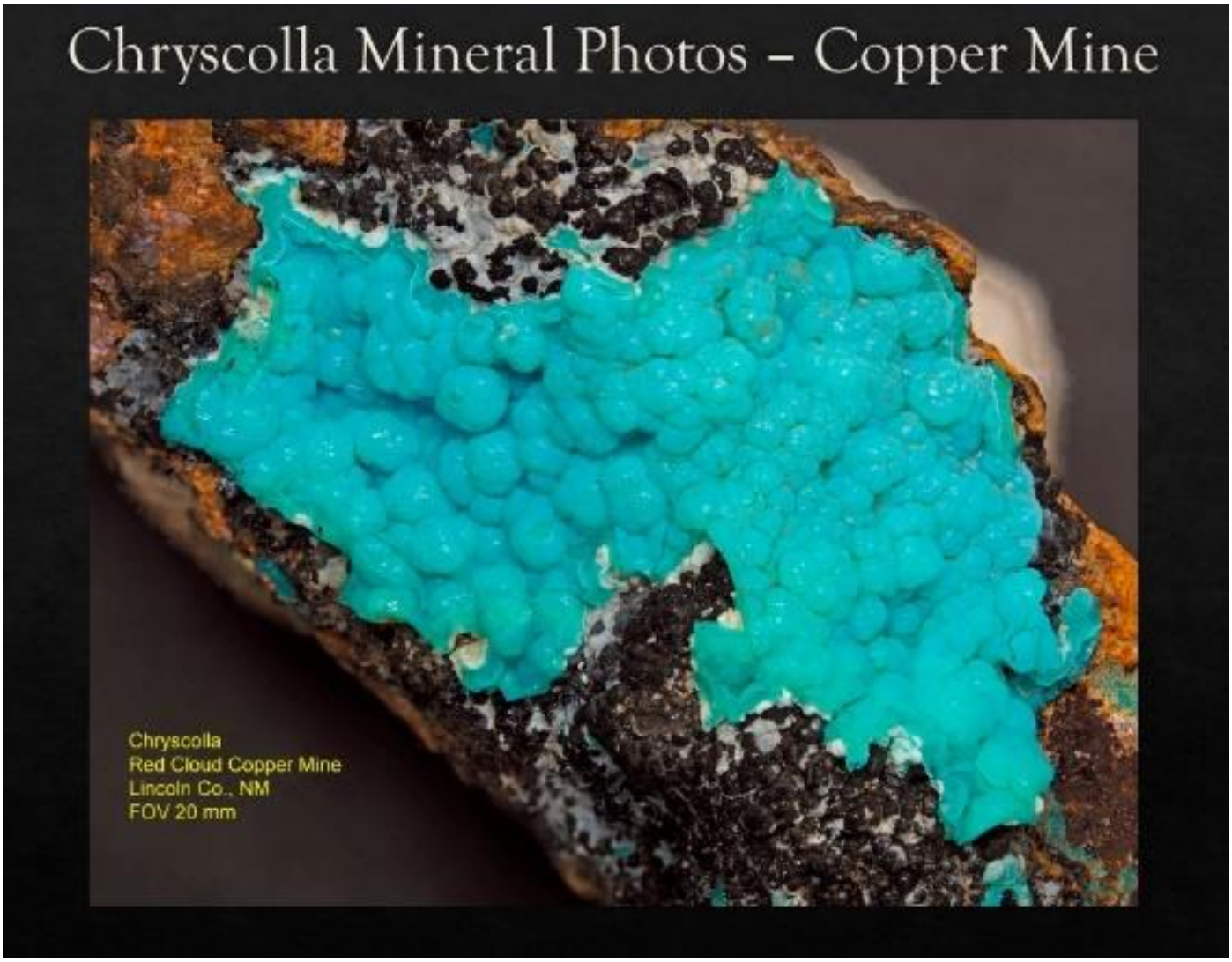
◄Here is a list of the many minerals that mindat.org has published as associated with the Red Cloud Copper Mine, followed by a few from among the many of Scott's extraordinary beautiful photos of several of his micro specimens.

▲Vanadinite Hexagonal Spears (Red) on Mottramite (black)

Each of the entire deck of Scott's images provided a beautiful, high-quality image showing the beauty of micro-mounts, such as the **►Vanadinite and mottramite crystals shown below in a one millimeter field of view (FOV).**

▲Agardite spray of spikes (green)

◄Calcite (Translucent) with Mimetite (yellow)



▲Chrysocolla in Botryoidal Formation (Blue)

Many of these minerals can be found in multiple crystal shapes. When formed under different pressures, temperatures and concentrations, Scott noted that chrysocolla, for example, can be grape-shaped (botryoidal, at left), or formed as pseudomorphs, as shown below.

▲Chrysocolla as Pseudomorphs

Paragenesis

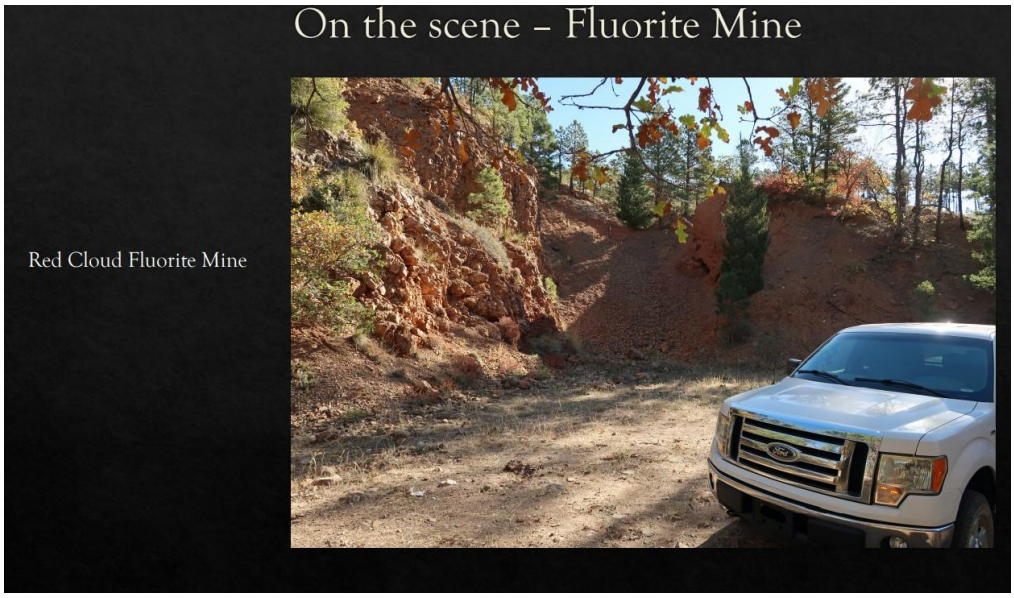
Scott pointed out that his photos also reveal another dynamic that can happen during crystal formation. It occurs during mineral crystal deposition from hydrothermal fluids and results in variations in the genesis of the specimen shapes he collects on his field trips. The two beautiful red vanadinite photos showed earlier in the program (see the first slide) are themselves a result of this chemical alteration of a previously deposited mineral, in this example, of lead.

▲Mottramite Two Ways

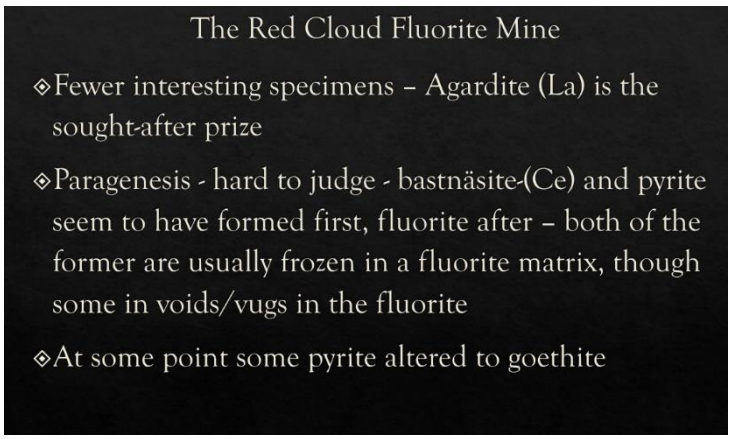
The mottramite (black) specimens in the photo above, for example, also can occur as depositions covering the underlying vanadinite crystals (red, seen toward the top left of the rock), or may entirely replace the vanadinite as pseudomorphs.

Red Cloud Fluorite Mine ►

The second mine Scott discussed was the Red Cloud Fluorite Mine. As the "on the scene" photo below suggests, this mine was also small by comparison with the size many people imagine industrial mining operations to be.



◄ Scott found that the Red Cloud Fluorite Mine has fewer interesting specimens than does the copper mine, as noted in its shorter list of minerals published by mindat.org.



Of all the fluorite mine's mineral specimens, Scott said, agardite is the "sought after prize." As suggested in the image below, the delicate spikes of the specimens would require unusual circumstances to protect it from being damaged. Also, agardite is associated with the family of rare earth elements, or REEs, known as the lanthanides. Accordingly, the photo below designates the specimen as "Agardite (La)" and so agardite can be identified as associated with several of the REEs, depending on which one has greater abundance, such as agardite (Ce) where Ce refers to cerium which is the REE typically most in abundance. He further noted that this mineral, agardite, is a member of the Mixite Group which consists of hydrated arsenates and phosphates.

▲Agardite (La)

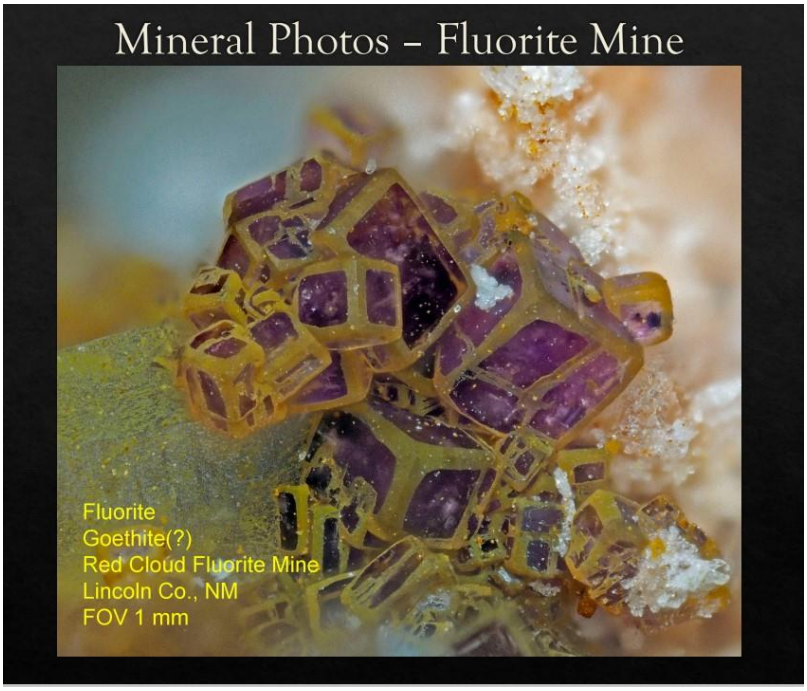
Bastnäsite is a family of carbonite minerals that contain rare earth elements, including cerium (Ce), as Scott's slide indicates below. He said these minerals often provide evidence of "paragenesis" in which, he tentatively opined, the bastnäsite or pyrite formed first, and then was engulfed by a fluorite matrix or captured within a vug in the fluorite.

▲Bastnäsite (Ce)

Sometimes, Scott added, the original pyrite subsequently alters to goethite, and Scott provided an image (at right) which seems to illustrate that transformation.

Pyrite to Goethite ►

On a special note, Scott showed an image of one of his collected specimens which appears rarely in the natural mineral world and which reminded him of a treasured Japanese art form used for healing cracked pottery. The fluorite crystals' modified edges, pictured below, are naturally coated with an unidentified gold-colored finish, possibly goethite.

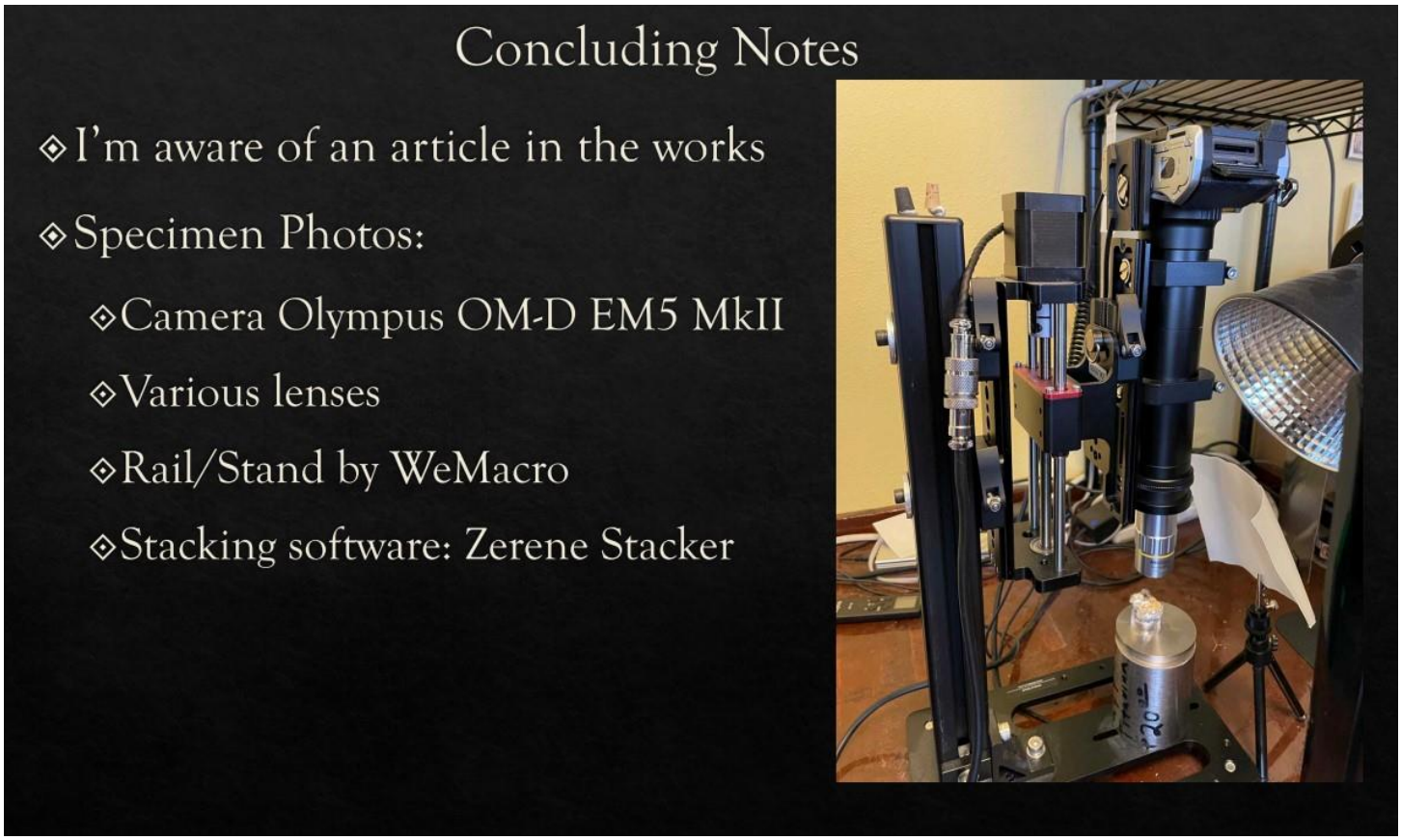


◄ Fluorite with Gold Edges

The striking gold edges reminded him and perhaps some of the MSDC meetings' attendees, of the Japanese "Kintsugi", the beautiful and fetching "golden joinery" art of pottery repair shown in the photograph below.

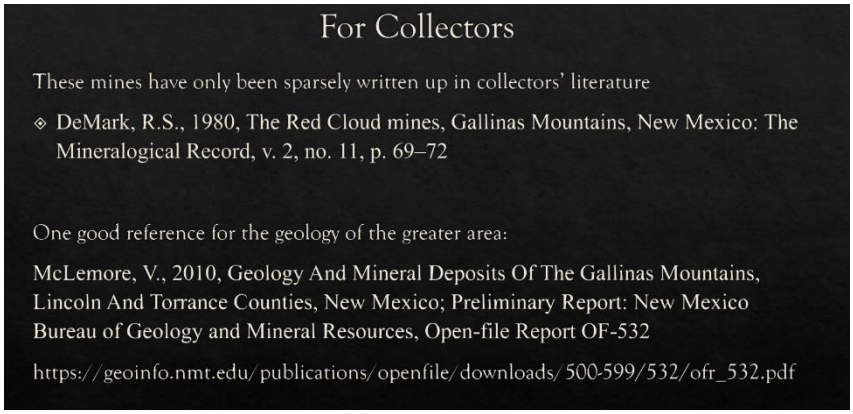
▼Comparison to Kintsugi

For mineral collectors interested in his photographic technique and equipment, Scott provided the following photo and notes that hint he may be publishing further information down the road.



Scott responded to questions about his lenses and about his techniques which included how to prep the specimens for photographing. He noted that when he finds a specimen that is covered in mud, he is grateful because the hardened clay seemed to have protected the delicate crystal structure. He cleans muddy specimens with water and compressed air. He also uses dental picks and, if there is no copper present, uses iron-out to reduce staining. Members' questions also included asking about the lenses he used for taking the photos while others asked about neighboring mines in the vicinity of the Red Cloud Mines.

For collectors who want to learn more about these mines and their minerals, Scott provided the following two references.



With Scott having answered the attendees' questions, Yury Kalish thanked him for his excellent and beautiful presentation.

Yury then asked if anyone had brought minerals they wanted to show the other Zoom attendees. Members enthusiastically shared a Virginia turquoise specimen collected in 1963; discussed collecting variations of sand crystals; spoke about using natural lighting to highlight mineral shapes for photographing; and, asked about Scott's experience with photographing fluorescent minerals, which he said was limited.

With the meeting having concluded, Yury again thanked Dr. Scott Braley for his presentation, thanked all for attending and encouraged people to mark their calendars for the February 3rd meeting when Mike Seeds will present: "The Universe in a Microbox."

Grandpa's Rocks

by John Weidner, MSDC Treasurer

Andrew Dobrovich was a rock collector and lapidarist. He had a nice collection, nothing great, but nice. A lot like mine.

He has an attractive geode, amethyst, rose quartz, some Petoskey stones, lots of polished pebbles and stones, and more. He has a good collection of fluorescents, mostly from the Franklin/Sterling-Hill area -- who isn't fascinated with fluorescent minerals? The box with his collection includes an admission ticket to the 1977 Kiwanis Club of Franklin Mineral Exhibit, along with a list of his purchases ($46.35 + $4 for two admissions).

Andrew, "Dobie" to his friends, has passed away. His granddaughter, Erin Dolby, contacted us to ask what she could do with his collection.

There's nothing there that would interest a professional dealer. I told you, his collection looks a lot like mine. In a normal year, we could have brought it to a club auction and raised a couple of bucks, but you may have noticed that this is not a normal year. I love the Zoom meetings our clubs are having, but you can't do an auction at a Zoom meeting.

After a couple of emails, we suggested to Erin that we could hold his collection until next October and bring it to the Kids Room at the George Mason University / Northern Virginia Mineral Club Show. There's enough fluorescent material that we can set up a neat fluorescent dark room for the kids. The polished rocks will be great in the kids mine. The geode goes onto the exhibit table. Many of the other rocks can be prizes for the quizzes and contests we have for the kids.

There are well over a hundred pieces we can give to kids in one way or another. Over a hundred kids are going to walk out of there happy because they got a rock originally collected or polished by Dobie. Over a hundred kids are going to think "Hey, this science stuff is sort of fun." It's easy to hook a kid on rocks. We always hope we hook one or two of them hard enough that they become lifelong collectors, and maybe even become a geologist.

If you can think of a better use for a rock collection than to make a hundred kids happy, let me know. I think Dobie would be pleased.

Humor Section

"AH, FOR THE GOOD OLD DAYS WHEN GEOLOGISTS WORKED OUTDOORS."

In Memoriam: Jennie Frances Smith
July 14, 1922 – Dec 18, 2020

(reprinted with permission from the MNCA Newsletter of January 2021)

by "Dignity Memorial," Houston, Texas

Jennie R. Smith passed away peacefully December 18, 2020 surrounded by family. A celebration of her life will take place in the Spring in Dixmont, Maine. In lieu of flowers, the family suggests donations be made to Micromineralogists of the National Capital Area (MNCA) 270 Rachel Drive Penn Laird, VA 22846 or North Texas SNAP (Special Needs Assistance Partners), P.O. Box 3294 Grapevine TX 76099.

Born July 14, 1922 in Clinton ME to Ralph and Fannie Runnels, one of five children. Jennie always wanted to be a teacher. Beginning with her childhood commitment to read every book in her small hometown library, Jennie was an avid reader consuming thousands of books in her lifetime. She attended Farmington State Teachers College where she earned her teaching degree. Jennie enjoyed teaching 3rd and 4th grades in Maine for several years. She married Paul E. Smith, living in Maine, South Dakota, 20 years in Park Forest, IL and 30 years in Fairfax, VA. They were married for 57 years and had two children, Woodrow and Paula. Jennie continued using her teaching and creative gifts through volunteering in children's community theater, leading a junior stamp club, as a 4-H leader, starting an Earth Science Club, teaching silversmithing, helping ESL students, and much more.

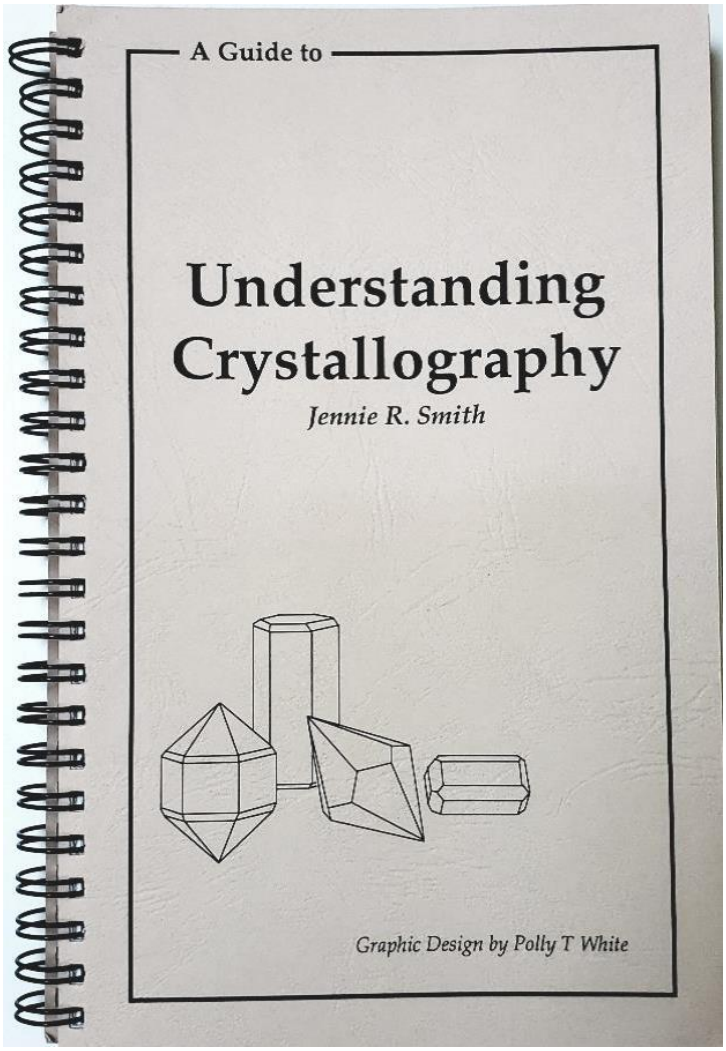
Jennie and Paul were enthusiastic rock, mineral and fossil collectors belonging to, and serving in, leadership in several mineralogical societies on the east coast. With her substantial writing skills and love of minerals, Jennie wrote "A Guide to Understanding Crystallography" to help the layperson understand the complex study of crystals. She loved all her family, teaching others at every opportunity, new adventures, traveling, the Washington Redskins, NASCAR, and peanut M&M's. Jennie was a gracious, caring, and generous lady who was known for making everyone she spoke with feel respected, listened to and encouraged.

After her husband's death, Jennie moved to Dallas, TX to be near her daughter, son-in-law and Texas grandchildren and lived there for the last 15 years in an active Senior community until she moved to Hurst,

TX this past fall to live with her daughter and family. She died peacefully at home December 18, 2020 surrounded by the love of family. She was preceded in death by her husband, Paul; parents, Ralph and Fannie Runnels; siblings, Gladys, Everett, Carlton and Hope; and granddaughter Amanda. She is survived by her son Woodrow A. Smith; daughter Paula Baker (Michael); grandson Michael D. Baker (Devynn); great grandchildren Grayson Baker, Emily Baker; grandson Daniel R. Baker; granddaughter Elizabeth "Lisa" N. Baker; granddaughter Jenna Boller-Smith; sister-in-law Irene Smith; nieces, nephews, grand nieces and nephews and friends.

Note: Micromineralogists of the National Capital Area club members remember Jennie being club president from 1978-79 and 1991-92. Jennie also taught crystallography from her book "Understanding Crystallography" which was a special publication of the Rochester Mineralogical Symposium in 1991.

Kathy Hrechka gives credit to Jennie for becoming a micromineral collector herself. In 1984 Kathy attended a local geology show, where people were viewing minerals under the microscope. It was Jennie & Paul, and Fred demonstrating micromounting, who invited Kathy to join a couple of local clubs, including the Micromineralogists of the National Capital Area. Kathy remembers carpooling with the Smiths to JMU for special geology workshops with Dr. Lance Kearns. Jennie was considered the educator, while creating slide shows for the club programs, archived by the Eastern Federation of Mineralogical Societies.



Dave Hennessey remembers Jennie Smith fondly, not from MNCA, for he was not yet a member when Jennie and Paul were active members, but from shared membership in other local clubs, the Gem and Mineral Hunters (now defunct Prince William County club) and the Northern Virginia Mineral Club. Jennie agreed to give a crystallography class to members in the Gem and Mineral Hunters club and for six Saturdays (one for each crystal system) eight people gathered at a member's home where she taught them about axes of symmetry, mirror planes, Miller indices, etc.

Jennie taught Dave all he knew about crystallography, which was much less than all she knew about crystallography. He still has the Crystallography book which she authored and autographed for him with the wry comment "you know the unautographed copies are much rarer than the autographed copies." Dave values his autographed copy and uses it regularly. Dave recently shared an email with another former Gem and Mineral Hunter members, Diane Nesmeyer, who said it simply, "Another great one has moved on to the great collecting grounds in the sky." She said it exactly right. Jennie was one of the greats. Kathy Hrechka along with many club members received micromineral holiday cards from the Smiths.

Understanding Crystallography: Jennie's book was dedicated to her husband Paul, and thanked Dr. Steve Chamberlain and the Rochester Mineralogical Symposium under whose auspices the volume was published. (*photos courtesy Kathy Hrechka)*

MSDC Club Information

Due to COVID-19, our meetings will be virtual over Zoom. No in-person meetings are planned until further notice. In non-COVID times, meetings are the First Wednesday of the Month (Jan-Jun and Sep-Dec). We meet in the Constitution Avenue lobby of the Smithsonian National Museum of Natural History at 7:30 pm.

Website: http://mineralogicalsocietyofdc.org/

Facebook: www.facebook.com/Mineralogical-SocietyOfTheDistrictOfColumbia

2021 Officers and Directors

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THE MINERAL MINUTES

NEWSLETTER OF THE MINERALOGICAL SOCIETY OF THE DISTRICT OF COLUMBIA

Mineralogical Society of DC
Time Sensitive Dated Material

"A man who keeps company with glaciers comes to feel tolerably insignificant by and by. The Alps and the glaciers together are able to take every bit of conceit out of a man and reduce his self-importance to zero if he will only remain within the influence of their sublime presence long enough to give it a fair and reasonable chance to do its work." **— Mark Twain in *A Tramp Abroad* (1880)**

Useful Mineral Links

	American Federation of Mineralogical Societies (AFMS)	www.amfed.org
	Eastern Federation of Mineralogical and Lapidary Societies (EFMLS)	www.efmls.org
mindat.org	MINDAT	www.mindat.org
	Micromineralogists of the National Capital Area	www.dcmicrominerals.org
	Mineralogical Society of America (MSA)	www.minoscam.org
	Friends of Mineralogy	www.friendsofmineralogy.org
	WebMineral	www.webmineral.com
	The Geological Society of America (GSA)	www.geosociety.org
	Jeff Scovil Mineral Photography (not advertising - just great photos)	www.scovilphotography.com
	United States Geological Survey (USGS)	www.usgs.gov
	The Geological Society of Washington (GSW)	www.gswweb.org

AFMS Code of Ethics

- I will respect both private and public property and will do no collecting on privately owned land without the owner's permission.
- I will keep informed on all laws, regulations of rules governing collecting on public lands and will observe them.
- I will to the best of my ability, ascertain the boundary lines of property on which I plan to collect.
- I will use no firearms or blasting material in collecting areas.
- I will cause no willful damage to property of any kind – fences, signs, and buildings.
- I will leave all gates as found.
- I will build fires in designated or safe places only and will be certain they are completely extinguished before leaving the area.
- I will discard no burning material – matches, cigarettes, etc.
- I will fill all excavation holes which may be dangerous to livestock. [Editor's Note/ Observation: I would also include wildlife as well as livestock.]
- I will not contaminate wells, creeks, or other water supply.
- I will cause no willful damage to collecting material and will take home only what I can reasonably use.
- I will practice conservation and undertake to utilize fully and well the materials I have collected and will recycle my surplus for the pleasure and benefit of others.
- I will support the rockhound project H.E.L.P. (Help Eliminate Litter Please) and will leave all collecting areas devoid of litter, regardless of how found.
- I will cooperate with field trip leaders and the se in designated authority in all collecting areas.
- I will report to my club or Federation officers, Bureau of Land Management or other authorities, any deposit of petrified wood or other materials on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes.
- I will appreciate and protect our heritage of natural resources.
- I will observe the "Golden Rule", will use "Good Outdoor Manners" and will at all times conduct myself in a manner which will add to the stature and public "image" of rockhounds everywhere.

MEMBERSHIP APPLICATION OR RENEWAL
THE MINERALOGICAL SOCIETY OF THE DISTRICT OF COLUMBIA (MSDC)

(___) Family – $25.00 per year. One address.

(___) Individual – $20.00 per year.

(____) New * (_____) Renewal Dues are for Year_____*

For new members who join in the last months of the year, membership will extend through the following year with no additional dues.

ANNUAL DUES – PLEASE PAY YOUR DUES PROMPTLY

Pay at next meeting or mail to:

Mineralogical Society of DC
c/o John Weidner
7099 Game Lord Drive
Springfield, VA 22153-1312

Name(s) (First and Last) _____

Address_____

City_____State_____Zip:_____

Phone(s): Home/Work/Mobile_____

Email(s):_____

OK TO INCLUDE YOU ON CLUB MEMBERSHIP LIST?

( ) Yes – Include name, address, phone, email.

If you want any information omitted from the membership list, please note:

Omit my: ( ) Email; ( ) Home phone; ( ) Work phone; ( ) Mobile phone; ( ) Address; ( ) Name

SPECIAL CLUB-RELATED INTERESTS? _____

Meeting Dates, Time, and Location: The first Wednesday of each month; no meeting in July or August.

(**Due to COVID-19, our meetings will be virtual over Zoom. No in-person meetings are planned until further notice.** Normally, the MSDC meetings take place at the National Museum of Natural History, Smithsonian Institution, 10th Street and Constitution Ave, Washington DC. We usually gather at the Constitution Avenue entrance at 7:30 pm to meet our guard who escorts us to the Cathy Kerby Room.)