The Mineral Minutes

Volume 78-09
September 2020

In this Issue:

Aaand … We Are Back! (Virtually…)

After cancelling three meetings in the spring because of COVID-19, and waiting patiently through our yearly's summer hiatus, the MSDC returns to regular programming at our usual time and date: **7:30PM Eastern Time** on the first Wednesday of the month, **September 2nd, 2020**.

Nothing is yet "regular," of course – our venue, the National Museum of Natural History, is still closed for meetings of outside groups, and "Phase Two" guidance from the District of Columbia recommends that older adults and people with underlying health conditions do not physically attend mass gatherings. Therefore, we are going virtual. A day or two ago, you should have received an email from the MSDC Treasurer, John Weidner, with a link for a **Zoom meeting**. If you have not received it, please email John (jfweidner42 at gmail dot com) and he will forward a link to you. Zoom is an intuitive and user-friendly platform. Even if you have not used it before, please give it a try. However, if you prefer, you can also call into the meeting without connecting to Zoom – this will give you access to the audio of the meeting, without the video. Call-in instructions are also included in John's email.

September 2, 2020 Program: "Catoctin Furnace" by Tim Rose

Who else would be brave enough to give the first virtual presentation to the MSDC but our own Smithsonian sponsor, Mr. Tim Rose? Tim's talk will focus on his recent research interest – the Catoctin Furnace, an iron works operation just north of Frederick, MD. Typical for Tim's presentations, we will hear a fascinating story that intertwines American history, local geology and mineralogy, and modern analytical methods.

Sharing Time

by Dave Hennessey, MSDC President

Tim Rose has advised that zinc oxide will play a role in his presentation, so that would be a good mineral for sharing time. Natural zinc oxide (zincite) is a primary ore mineral at Franklin, New Jersey so I'm sure that is represented in some of your collections. I also remember many fabulous crystalline zinc oxide specimens on the market maybe 10 years ago. They were not natural, having been collected from the smokestacks of smelters in Poland where they formed on the interior surfaces (there must have been some truly foul smoke going up those smokestacks). Perhaps some of you have specimens that you acquired at that time. The primary ore of the Catoctin Furnace Iron Formation was hematite, so that would be another possibility for sharing time. And of course, anything else you want to share for any other reason is welcome. If it interests you it will interest the rest of us.

Prez Says…

by Dave Hennessey, MSDC President

I hope this newsletter finds everyone in good health and continuing to behave responsibly – masks, washing hands, and social distancing. Normally at this time of year kids would be heading back to their schoolrooms and fans would be crowding the bleachers as another college football season gets underway. Well scratch all that. The new normal, at least in the near term, is going to be more staying at home and more connecting online instead of in person. And so it shall be for MSDC as well.

(Cont. on p. 2)

(Prez Says… continued)

I am happy to report that our webmistress, Betty Thompson, has volunteered her Zoom skills to serve as host(ess) for a virtual meeting of MSDC on September 2nd. Betty indicates she has not mastered all the Zoom nuances but does have experience hosting Zoom meetings for other organizations of which she is a member.

The stars have also aligned to provide us with a presentation for September 2nd, from our Smithsonian sponsor, Mr. Tim Rose. He understands our newness to the Zoom experience and it is great that we will have his patience as we go down this Zoom path for the first time. This is likely to be the first of many Zoom meetings we will be having. Tim has reported that the Smithsonian's phased reopening will not allow for any in person meeting at the Smithsonian during the remainder of 2020. If we get lucky, perhaps we can meet there again in person some time in 2021. We shall see. I will defer to Yury to tell you the particulars of Tim's program.

It will be good to see everyone's bright and shining faces on the Zoom grid (which kind of reminds me of the opening of the old TV show, "The Brady Bunch"). See you on the evening of Wednesday, Sept 2nd.

Archival Treasures

An upshot from having no meetings for the last several months is an opportunity to look back at the issues of the Mineral Minutes from years ago. In the May newsletter, we reprinted articles on Yellowstone by Tom Tucker and on the Blanchard Mine by Susan Fisher. The June newsletter included "Mineral of the Month" articles by Susan Fisher and Sheryl Sims' description of Dr. Eloise Gaillou's presentation about diamonds.

For this newsletter, we have selected two articles by a family team of Andy and Betty Thompson on two very different topics – one out of this world, and another very local. Andy Thompson wrote about the Rosetta Comet Project in our May 2015 issue. Betty Thompson described a presentation by Scott Southworth about Geology of the Great Falls of the Potomac and Mather Gorge in the December 2010 issue. The images have been added for this re-publication.

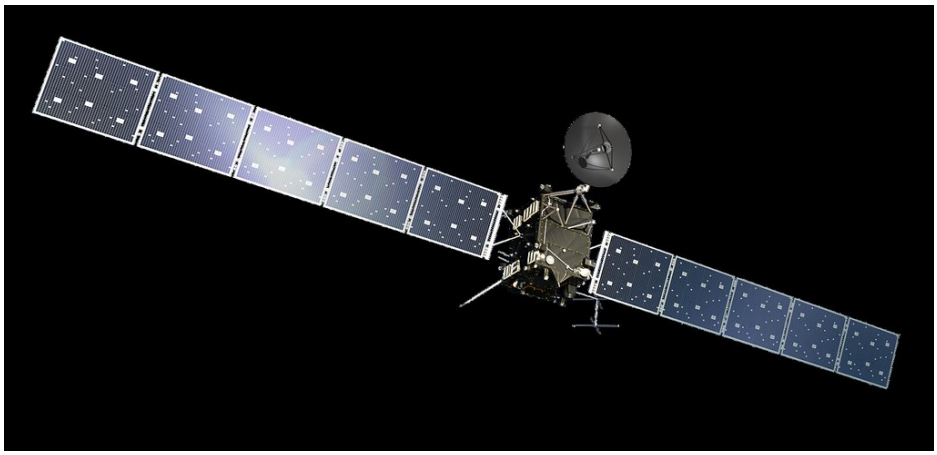
Blast From the Past: 5 Years Ago
May 2015: The Rosetta Comet Project: What's in a Name?
By Andrew D. Thompson

Many readers will recognize the often-quoted line in Shakespeare's play *Romeo and Juliet*, "a rose by any other name would smell as sweet". Juliet urged Romeo to look beyond the feud between their two families because, she said, the names of things, such as their family names, do not determine or define who or what they are as individuals. With that literary caveat in mind, have you ever wondered why scientists so often use ancient language names to identify projects and objects pertaining to their study of the solar system?

In the beginning of astronaut flight, for example, NASA scientists chose the names Mercury, Gemini and Apollo. Those exploratory flights have been followed by more than 200 U.S. and internationally sponsored unmanned fly-bys which have probed planets, moons, asteroids and comets.

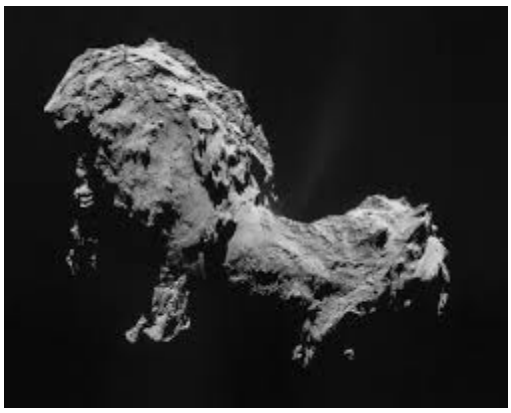
The most relevant case in point is the decades-long effort to discover the nature of comets as a key to understanding the origin of our solar system. International collaboration between the European and U.S. space agencies has accomplished a first, the soft landing of a probe onto the surface of a comet. And what was the name the scientists gave to this project? They called it the Rosetta Project and it included two crafts, the Rosetta orbiter, and a smaller lander Philae. Both names are ancient Egyptian references. Of course, it helps when doing international collaborative work if the projects' names are politically neutral. But sometimes there is significance beyond avoiding conflict.

In November of 2014, the Rosetta orbiter deployed the probe which successfully landed on the surface of the 67P/C-G comet. The name Rosetta, of course, refers to the engraved stone which helped linguists crack the previously undeciphered hieroglyphics. Further evidence the scientists really got into the parallel between these two puzzles, hieroglyphics and comets, is they named one of the main instruments on the Philae lander "Ptolemy."



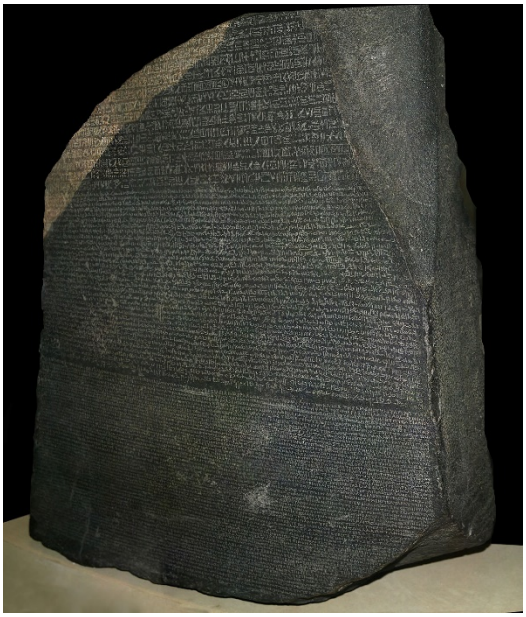
The spectacular nature of this most recent achievement and its prominence in today's media invite us to drill down a little into these two names and consider whether they shed light on the nature of this interplanetary project. In other words, to what extent do the names Rosetta and Philae enhance the Shakespearian "sweetness" of the scientists' pursuit and recent success? Readers can be the judge.

Comets have captured the imagination of humans at least since the beginning of recorded history. Even the name "comet" (from coma or kome) meaning "hairy star," is fanciful, as is the meaning given it by early astrologers who believed a comet's appearance foretold the imminent death of a king. Leaving such random mythology behind, today's international focus has been to systematize all known comets and name them after the individuals who discovered them or were first to correctly predict their reappearance and the period of their recurring visitations as they circled close to the sun, their perihelion.



For the comet in question, P67/C-G, it was first identified by two Soviet astronomers, Klim Ivanovych Churyumov and Svetlana Ivanovna Gerasimenko. They saw it on photographic plates in 1969 and so it was named Churyumov-Geraskmenko. The "P67" designation is a reference to how this comet is indexed. So its shorthand name is P67/C-G.

What some readers may find particularly interesting is how the comet project came to be named "Rosetta". It is common knowledge that what enabled linguists to interpret hieroglyphics and the origins of the Egyptian culture was the discovery in 1799 of a three-foot high dark granite stone. It contained essentially the same text in three languages praising the deeds of King Ptolemy V. The texts included hieroglyphic pictures, a later non-hieroglyphic Egyptian script similar to early Coptic, and ancient Greek. The French emperor Napoleon had invaded and conquered Egypt in 1798 and one of his soldiers found the Rosetta stone. The British soon arrived, defeated the French and transported the stone to the London museum where the stone has been its most celebrated and visited display since 1803.



It took two decades of scholarly discernment and international competition among linguists before the mysterious Rosetta hieroglyphic text was successfully translated in 1822. That translation depended on the study of other hieroglyphic texts found on several Egyptian monuments. The main code-breaker, Jean Francois Champollion, used a text on an Egyptian obelisk that had been discovered in 1815 and named Philae after its place of discovery. This Philae obelisk, like the Rosetta stone, also contained hieroglyphic pictures and a Greek text. By scrutinizing the Rosetta stone in light of Philae and other Egyptian texts, Champollion finally was able to crack the code that had puzzled scholars for the many centuries after hieroglyphics had fallen into disuse and its meaning forgotten.

The scientist who initially proposed the name "Rosetta" for the current probe was Professor Eberhard Grun, a renowned expert on comets and interstellar dust. He was also an interdisciplinary scientist and a native German who worked in Heidelberg. The idea occurred to him in 1986 and he first publically proposed it in 1987. His suggested name met with immediate acceptance. Grun described that moment in the following words.

"When this idea first crossed my mind, towards the end of 1986, I went to the library at the University of Heidelberg to learn more about the Rosetta Stone and how it revolutionized the study of Ancient Egypt. There was clearly a parallel with comets and their role to interpret the history of the solar system, and besides, the name 'Rosetta' was much more powerful than what we had before . . .so it stuck pretty quickly. "

Comets are the most primitive elements in our solar system. They seem to have remained unchanged from the time before our sun ignited and our planets began their formation. So comets were recognized as the key to understanding our solar system's origin.

Like Champollion in the early 1800s, today's scientists studying 67P/C-G also use two main sources of information, data from the orbiter and from the lander. By comparing the data they can better understand the comet's chemistry and the origin of our solar system. My own opinion is that the use of these two ancient classical names, Rosetta and Philae, does evoke the sense of struggle with unknowns, and also the confidence there will be an optimistic triumph over the obscurity of our solar system's origins. In that sense, perhaps these ancient Egyptian names do add a bit of sweetness to the on-going story of comet exploration, Shakespeare to the contrary.

Here are two mineralogical footnotes to the above story. The first is that it is still a bit early for scientists to be reporting on Rosetta's findings as to the mineralogy of comets except that they are rich in deuterium.

The second concerns the mineralogy of the actual Rosetta stone itself. It had presented scientists with a bit of a mystery for the first century after its discovery in the 1800s. Initially many thought it was granite. Later public opinion changed to say it was basalt. Even today, many current articles describe the Rosetta stone as basalt due perhaps to earlier reports of its black color. In fact, however, the dark appearance was artificially introduced in the early 19th century when the stone was covered with layers of black ink that were repeatedly applied to make copies of the texts. Later it was covered with wax to protect the stone from the greasy fingers of all who wanted to touch this piece of history.

After a careful cleaning in the 20th century, the natural color turned out not to be black but a dark gray. Its mineral composition was then identified as actually granodiorite, an intrusive igneous rock containing more plagioclase feldspar than granite's orthoclase feldspar. It also contains black biotite, dark-gray hornblende, white plagioclase and gray quartz. It has traces of pyrite whose oxidized iron gives the stone a faint rusty tint. Its mineral name, granodiorite, designates it as closely related to two similar minerals, granite and diorite. Mineralogists have solved the early confusion although the misidentification "basalt" commonly appears in today's public literature.

Blast From the Past: 10 Years Ago
December 2010: Geology of the Great Falls of the Potomac and Mather Gorge (and a PS on Sugarloaf Mountain) by Scott Southworth as reported by Betty Thompson

Scott Southworth has been a geologist with the US Geological Survey for 30 years. His interest in rocks began when he was a youngster finding sharks' teeth east of Fredericksburg, VA, along the Potomac River. That curiosity continues to yield extensive research about the Piedmont and a tall pile of publications, many available online through USGS and some free. They include 34 USGS catalog items, like Geology of Loudon County and Geology of the National Capital Region (2004), which won the Geoscience Information Society's Best Guidebook award and was produced in association with the Geological Society of America regional meeting. His Geology of the C&O Canal is not free but is available by mail at http://pubs.usgs.gov/pp/1691/ ; it also won the Geoscience Information Society's Best Guidebook award. Just google him or search his project web site[1] and you will find many, many tempting routes to learn about what's under our feet in the DC metro area and in the whole Piedmont and Blue Ridge, from Pennsylvania to Georgia.

Scott had prepared a presentation that focuses on the Piedmont. At the absolute last moment, it became clear that the MSDC-supplied computer could not support the later software version of his presentation. Drawing on his immense expertise and equally impressive flexibility, with zero prep time he gave an impromptu geological tour of the Great Falls of the Potomac and Mather Gorge, just below the Falls. He used beautiful slides that David and Leslie Nanney had taken there the prior weekend, which they had shown briefly as a prequel to his planned presentation. So this talk became a prequel to the Piedmont presentation, which he will most graciously give at a future meeting.

A number of years after Avery Drake at the USGS asked Scott to work with him on the western Piedmont, Scott decided also to explore the "backyard" of his Virginia home: the C&O Canal and great Falls. He noted that Park Service staff often must focus on managing their parks, with little time to explore the land itself. So, as part of their sister agency in the Department of the Interior, the USGS, Scott began to tell them much more about the land they manage at Great Falls National Park.

The Potomac's fall line is where the upland bedrock becomes alluvial or marine coastal plain. The upland bedrock dates to before and during the Taconic orogeny, about 600-440 million years ago. Below the Falls, Theodore Roosevelt Island is an eroded bedrock island. If you cross the Roosevelt Bridge, the outcrop on the north side of the bridge is the last outcrop of the Piedmont. After that, it's alluvial sediment deposited on bedrock. The major cities of New York, Philadelphia, Washington, DC, and Richmond lie on this line where sediment overlaps bedrock, because ships could reach these locations below the falls of various rivers while the falls themselves provided energy for commerce.

Nowhere are the rocks of this geological structure clearer than at Great Falls. Our entire area sits on the same rock formation, but the waters of the Potomac have exposed them at Great Falls. Geologists name rock formations based on the locality where they are best observed. Originally the rock formation that includes our area was named the Wissahickon after the creek near Philadelphia where the formation was first identified. In the 1950s geologists documented similar rocks in our area. (Remember that this was before the recognition of continental drift or plate tectonics.) In the 1980s, Avery Drake of the USGS pointed out that Mather Gorge is the best place to see these rocks and therefore the formation is now called Mather Gorge.

[1] Webpage address updated for this publication.

The formation is composed of metagraywacke and schist. Graywacke (a hard, dark sandstone with quartz and feldspar in a compact clay matrix) is thicker and very resistant, which explains why Great Falls is where it is. Greywacke and schist are integrated and interrelated at all scales; you can't really map the separation unless you choose to simply show the dominant material at a particular point. Rocks like these are very difficult to work with because the metamorphic material got so hot and was buried so deeply. Scott used the Nanneys' slides to illustrate this formation.

In other slides, he focused on Bear Island. Bear Island is mostly bedrock, maybe with some sediment-filled potholes. There is a migmatite zone on the southern end of Bear Island, with gorgeous wavy marble-ized forms, crystallized and partially reconstituted. There are no fossils here because these formations likely predate fossils! Igneous rocks are dated through their zircon crystals. The rock shows lots of erosional features like channels and potholes; if you remove quartz grains from them, analysis can tell you when it was exposed to the sea. Studies show that the dominant erosion event in the Mather Gorge was about 35,000 years ago. The Gorge was not cut out by glaciation. Although the Laurentide ice sheet was huge, from the Arctic to central Pennsylvania, and a full mile thick, it didn't come this far south. It caused the climate here to be very cool, with howling winds. But the Mather Gorge erosion came from the later glacial outwash and rains, not from the glacier itself.

Along Great Falls, some of the erosional channels have a very unusual step-like appearance. Don't be fooled: these steps were carved in recent years as fish ladders to help the shad, herring and other fish to get upstream, past the falls! At the top of the cliffs that line the gorge, one area is labeled "bedrock terrace forest" but the forest itself is only about 70 years old. The area was clear-cut more than once. It's hard for a forest to grow on bedrock, but there are many plants that have made homes here; some may be rare. Scott noted that the Potomac River "bulldozed" the parking lots on the Virginia side of Great Falls Park, exposing the bedrock and then, about 35,000 years ago, cutting down to the level of Bear Island's bedrock. Those who've studied this think it was probably a very rapid process. Bear Island is the only place in the gorge where you can take a mineral sample and get true lab results. Other rocks in the gorge have been so affected by what has happened since their formation that they are almost impossible to date.

In another slide, he pointed out that the gorge holds a lot of exotic rock materials. There are 3-foot-diameter boulders as well as many other rounded alluvial rocks that have rolled here via the Potomac headwaters from Seneca and Harpers Ferry.

Several slides gave lovely views of vein quartz, often with folds. The quartz was introduced as fluid during deformation, which results in transposition. Others showed a fairly rare formation of fine parallel lines or ripples: mesoscopic vein quartz and pin-striped gneiss. This occurred because individual seams of quartz were rejected during deformation and cut by vein quartz. The cracks opened due to Mesozoic expansion as the Atlantic was opening up. The quartz carried the gold that has been mined in many Maryland creeks.

The photos included beautiful views of the rock face. The obvious upright strips and lines are the original layers of sediment, now rock and now upended in a dramatic illustration of geological change. Potassium and feldspar crystals have been found, as well as turbidites, which are formed during sudden deep drops of sediment into an oceanic trench (as in Monterey Canyon in California; see USGS website). The rocks show soft features that are sediment deformations which occurred deep underwater and due to gravity. In some areas of the gorge there has been too much geological action to get an accurate orientation of the rock.

The obvious upright fractures in the rock face give wonderful evidence of the Taconic orogeny. On the tops of the rock face are lamprophyre dikes – Devonian, 360 million years old. But if you put your arm down into a fracture, you can literally reach back into time. The fractures cut through, straight as an arrow, with no folds, into rock that was deformed about 475 million years old; dikes intruded and created the fractures 360 million years ago. The wondrous part: these long fissures have not changed since then; the fractures remain as straight as when they formed so many ages ago. And here at Great Falls, they are visible from far distances.

Another marvel: Mather Gorge is so straight that it could look man-made. Scott commented that you could lay a 5-kilometer ruler along the gorge. But there are no cross-fractures in the rocks along its parallel sides. Given that regularity, Scott noted that geologists draw a fault line along the gorge with very little evidence; the only way to prove the existence of a fault would be to drain the river.

In response to a question, Scott also shed light on Sugarloaf Mountain in Maryland. As a monadnock (an isolated small mountain), Sugarloaf has always been an attraction for people. It's very complicated rock – a very resistant quartzite surrounded by softer rock in the Urbana formation, together with very deformed slates. In the 1950's, John Hopkins University students under David Scotford and Dick Nickelsen devised a method of outcrop mapping. Most people think that geologists map by doing transects, that is, by walking across rock in several places and "connecting the dots." Instead, this team pioneered a really wise method: they walked a rock bed and mapped it as it lay. When Scott did the same at Sugarloaf, it was clear that Sugarloaf is part of the Weverton Formation of the Chilhowee Group, the same as in the Catoctin Mountains. This is Blue Ridge stratigraphy popping up through the Piedmont, which sounds complicated but became really simple in Scott's quick free-hand drawing. The Frederick Valley is Cambro-Ordovician limestone and dolomite. The Piedmont sheet that came up over it has been eroded away, which exposes the valley. But the Weverton Formation, which thrusts higher in the Blue Ridge and then sinks below the Frederick Valley surface, rises again to create Sugarloaf.

Scott Southworth shared with us his wealth of knowledge of Great Falls, Mather Gorge, and, as a postscript, Sugarloaf Mountain: our complex local geology. His presentation was fascinating and wonderfully informative in enabling us to glimpse the forces at work both in individual rocks and in the overall formation of Mather Gorge. He created this superb presentation ad-hoc, with not a moment to prepare, drawing on his immense expertise, his brief look at the Nanneys' slides, and his skills as a speaker. We are eager for his return to give us "the rest of the story" of the Piedmont. And we are very grateful for his marvelous introduction to the world under our feet right here at home.

MSDC Club Information

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

2020 Officers and Directors

President - Dave Hennessey | davidhennessey@comcast.net

Vice President - Yury Kalish | yury.kalish@gmail.com

Secretary - Andy Thompson | thompson01@starpower.net

Treasurer - John Weidner
mail: 7099 Game Lord Dr, Springfield, VA 22153-1312

Directors
Ken Reynolds | KennyReynolds62@gmail.com
Dan Teich | danteichdvm@yahoo.com
Leslie Nanney | DNanney@cox.net

Webmasters
Betty Thompson | bdthompson01@yahoo.com
Casper Voogt | casper.voogt@gmail.com

THE MINERAL MINUTES

NEWSLETTER OF THE MINERALOGICAL SOCIETY OF THE DISTRICT OF COLUMBIA

Mineralogical Society of DC
Time Sensitive Dated Material
First-Class Mail

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
	Mineralogical Society of America (MSA)	www.minoscam.org
	Friends of Mineralogy	www.friendsofmineralogy.org
	WebMineral	webmineral.com
THE GEOLOGICAL SOCIETY OF AMERICA	The Geological Society of America (GSA)	www.geosociety.org
Scovil PHOTOGRAPHY	Jeff Scovil Mineral Photography (not advertising - just great photos)	scovil photography.com
USGS science for a changing world	United States Geological Survey (USGS)	www.usgs.gov
The Geological Society of Washington	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 and 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 D.C. We usually gather at the Constitution Avenue entrance at 7:30 PM to meet our guard who escorts us to the Cathy Kerby Room.)