

Mineralogical Society of the District of Columbia

MINERAL MINUTES



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Club Meeting: Wednesday, April 7, 7:45 PM

The regular monthly meeting of the MSDC will take place as noted above. We meet at 7:45 PM in the lobby of the Smithsonian Natural History Museum.

Speaker: At our April meeting we will be honored to have Eloise Gailou, a visiting scientist at the Smithsonian as the speaker. Dr. Gailou is from Universite de Nantes, France, and will speak on her work on investigating the causes of color in blue and pink diamonds through the study of natural and synthetic diamonds. The following is an abstract of her talk.

On the Beauty of Defects: Color in Diamonds

The prices people are willing to pay for naturally occurring, colored diamonds has reached an all time high recently, with blue and pink diamonds selling at up to and over a million dollars per carat at auction. Are these diamonds so rare that they deserve such prices? What causes the rainbow of color we can observe in them? Should we be concerned about synthetic diamonds and natural but treated diamonds? Is such gemological trickery easily distinguishable when contrasted with an untreated, natural colored diamond? All these questions and many more will be answered in this talk!



Blue Heart,
30.82 ct ©
Smithsonian
Institution

Place: The National Museum of Natural History, Smithsonian Institution, 10th Street and Constitution Ave, Washington D.C. We will gather at the Constitution Avenue entrance at 7:45 PM to meet our guard who will escort us to the Cathy Kirby room. If you park on the street, **BE SURE TO CHECK SIGNS TO DETERMINE THE STATUS OF STREET PARKING. THERE ARE NOW PARKING FEES, PAYABLE AT THE KIOSKS, AND ENFORCEMENT UNTIL 10 PM.**

Dinner: Some of us will meet for dinner at the Pier 7 Restaurant at 6:00 PM for dinner before the club meeting. Give President Andy a call at (301) 270-6790 so he can make reservations if you wish to attend.

The Prez Says - A Word From the President **- Andy Thompson**

A funny thing happened to me as I was making my way toward the middle of March. In fact, it was the first weekend of March. I found myself, for the first time ever, attending the annual meeting of the Eastern Federation Mineral and Lapidary Society (EFMLS). The participants were the presidents and delegates from many of the 150 or so mineral clubs along the eastern seaboard. So I want to report back to the club on my experience.

In recent years, MSDC has been ably represented at this conference by Cynthia and Clarence Payne, Cathy and Bruce Gaber, and Susan and Ed Fisher, who would subsequently report back to MSDC on the issues and concerns discussed during their watch. More recently EFMLS has benefited from the vision and leadership of our own Mary Bateman, who, along with Matt Charsky, have served as recent past presidents of the organization.

EFMLS is the umbrella organization which deals with the big-picture administrative issues, such as obtaining insurance which encourages quarry owners to continue to

welcome collectors, promoting quality writing and composition in club newsletters, raising funds for geology-related scholarships, and promoting objective criteria for judging mineral and fossil showcase, etc.. True to the Eastern Federation's objective of strengthening local mineral clubs, this annual conference is typically held in conjunction with a local club's annual mineral show. This year's EFLMS conference, held just south of Wilmington, Delaware, was hosted by the Delaware Mineralogical Society. Their 47th annual show upheld its tradition of displaying numerous excellent showcases for minerals and fossils.

A number of MSDC club members also came just for the show, including Susan and Ed Fisher, as well as new MSDC members Andy Muir and Mark Dahlman, who came to the March MSDC meeting and walked away with the two door prizes. So I suspect Jeff Guerber now has serious competition for winning the monthly offerings. A number of members from other clubs local to the Baltimore national Capital area also attended. So I felt very much at home among old friends and had the chance to meet new folks as well.

The Eastern Fed weekend combined both business and socializing, through meetings and a dinner, respectively. One old fashioned carry over component, perhaps from before the ease of internet communication, was the opening event, an old fashioned two-hour 'cracker barrel' session, where anyone could raise an issue or concern, and the attendees would then add their two cents or move on to discussing other topics. Much of this meeting seemed to be a spontaneous exploration of whether the contributed scholarship money was well used by giving it to college students or by other uses such as equipping junior and senior high school earth science teachers with geology specimens. The underlying discussion then morphed into the critical question: How can clubs better promote the hobby and recruit new members. I wondered if such an important topic would be better addressed beyond the cracker barrel and in a more formal manner. But then again, at least these questions did receive air-time and that was certainly the will of the participants.

If you are interested in being a delegate and attending next year's Eastern Federation conference, it will be held in Syracuse, NY, July 7-10, 2011. Or, if you want to pass on the conference and attend the broader events, I think you will be in luck. Next year, the conference will be held in conjunction with the American Federation of Mineralogical Societies, the parent organization of all seven regions throughout the United States. So it should be a rich gathering with extensive opportunities for rock hounds across a wide spectrum of interests. Let me know if you have even a tentative interest and I'll keep you updated.

MSDC Meeting Minutes - March 3, 2010 **- Andy Thompson (acting on behalf of Secretary Betty Thompson)**

The unusually noisy group was called to order by Andy Thompson. Due to the snowmageddon event which shut down much of the nation's capital, some MSDC members were snowbound in their homes for over a week. So they were very happy to get out and talk to *anybody*. Past presidents Ed Fisher and Cynthia Payne were thanked for their previous service and guests Andy Muir and Mark Dahlman were warmly welcomed to our gathering.

The Minutes of the January meeting, published in the March newsletter were approved as printed. Club treasurer Rick Reiber gave his report on the club's finances which indicated MSDC is in good fiscal shape. Andy gave an update on future club programs, including April's presentation by Eloise Gaillou on color in diamonds, which Vice President Tom Tucker has lined up.

Members discussed the new regulations for parking along Constitution Ave. Someone suggested that the simple resolution is to park within the parking lot of the Natural History Museum. Members were advised to tell the guard that you were there to attend the mineral club meeting. Flash a membership card or some i.d. and that seemed to work for those members who tried that approach. Others chose to feed the parking kiosk, \$4 for two hours, and display the receipt inside on the non-driver's side of the dashboard.

Andy then asked the advice of the attendees as to any issues they wanted him to bring before the Eastern Federation members at the upcoming annual conference that coming weekend in the Newark, Delaware area. Some members asked that Andy obtain a one-page written summary of what exactly the insurance money covered. There followed some discussion of that question, with the general understanding being that the insurance does not cover the club member, but rather the quarry owner against liability incurred in case the club member were to damage the quarry owners' or property owners' equipment or goods. Andy said he would seek such a one-page written explanation.

The MSDC website is finally being updated, on a gratis basis, by Casper Voogt, the webmaster of the Northern Virginia club. We are deeply appreciative of Casper's competence and generosity.

With regard to 'geology in the news,' members briefly noted the geologic effects of the Chile earthquake.

The door prizes were a black garnet with melanite from an unknown geographic location, and a mica in tremolite from the Flintkote Texas Quarry in Maryland. They went to Andy Muir and Mark Dahlman, our guests for the evening's meeting who subsequently became our newest MSDC members.

Andy thanked Susan Fisher and Betty Thompson for supplying goodies for the evening. And, an unknown member secretly contributed excellent cookies.

Members then called for and seconded the close of the business meeting. At that point, Tom Tucker, Chair of the Program Committee, introduced and conducted the evening's program on phonolite minerals, described below.

Summary of the MSDC March Program

- Susan Fisher

The March 3, 2010 program was a presentation on the **Aris, Namibia, Phonolite** and its very special minerals. Tom Tucker narrated a program prepared by **Mr. William Lechner**, President of the Canadian Micro Mineral Association, who lives in Scarborough, Ontario. The program covered in detail the unusual locality at a road metal quarry in Namibia. The site, actually made up of two pits on two adjacent properties, is located about 25 km south of Windhoek on the road to Rehoboth. The quarries are located in one of the numerous mid-Tertiary phonolite dykes, plugs and associated hydrothermal features that intrude the quartz-feldspar gneisses, mica schists, and amphibolites in the area. The phonolite, an igneous rock with a high proportion of alkaline metals - sodium and potassium in particular - has numerous small vesicles or vugs which are filled with tiny mineral crystals, some of them new to science. At present approximately 70 (now the count may approach 80) different mineral species have been found in these vugs, including at least four new to science. Others are still being studied and described by researchers scattered around the world. The presentation included a large number of impressive photographs of these very tiny minerals. Especially notable were the lovely golden sprays of Taperssuatsiaite, hopped silver Galena crystals, and reddish cubes of Villiaumite.

Similar alkaline rocks are found in many other localities including world famous the Demix-Vareennes and Mount St. Hilaire quarries in Quebec, Canada, the Kola Peninsula in Russia, and in Virginia, at Buck Hill, in Augusta County. The program showed pictures of the same minerals from these locations so they could be compared to those found at Aris.

Tom provided samples from the Aris quarry so that members could have a piece from the site and examine them at their leisure. (Editor's note: When I examined my sample under the microscope, I could identify Cryolite, Taperssuatsiaite, Natrolite, and Aegirine. There were other minerals there, but I haven't figured them out yet.)

One of My Favorite Things - Fluorite from the Blanchard Mine, Socorro County, New Mexico

- Susan Fisher

(**Acting Editor's Note:** The Mineralogical Society of DC is made up of a group of enthusiastic, well informed mineral, fossil, and rock collectors. As such, we all have our favorite things we like to add to our display cabinets and discuss with other interested collectors. I propose a column in the *Mineral Minutes* to do just that - share our interests with our fellow members. Your article does not have to be long or scholarly; it just needs to provide some insight into what interests you. It can pertain to a favorite mineral, fossil or rock, or a favorite site or collecting trip. The natural world is full of wonder that can be enhanced by sharing. **Please let me know how you feel about such a column.** Just to start this thing off, I have put together a short piece on one of my many favorite things.)

As anyone who knows me understands, I am a mineral fanatic. That usually becomes evident in the first five minutes of conversation. My collection contains minerals from all over the world. Each mineral I buy has some special appeal for me, but I have a strong affinity for a few very special minerals and a few very special sites. I am totally enamored with the beautiful minerals from some Bulgarian sites, almost any mineral from Tsumeb, the fantastic minerals from Dal'negorsk, and **FLUORITE** - any size, shape, or color of fluorite! This love of the well crystallized CaF_2 has caused me to overload my basement with pieces from numerous locations including several from the well known Blanchard Mine group. That location has produced a rather astounding array of colors and crystal forms. The variety present causes me to reflect on the surprises nature has to offer.

As a bit of background, the Blanchard Mine group, owned by the Portalas Mining Co., is a cluster of tunnels, pits, and prospect holes in a remote area of the northern Oscura Mountains of eastern Socorro County near Bingham, New Mexico. The lead and silver ore that is produced comes from the Council Springs Limestone member of the Pennsylvanian Madera Limestone. According to Mindat, there are at least 48 valid minerals found there, including Scrutinyite (alpha - PbO_2), for which this is the type locality. The property has been sometimes known as Hansonburg Lead mine and McCarthy Lead mine.

Although mining activity for lead has existed in the Hansonburg mining district, which includes the Blanchard mine, since about 1872, the earliest reference to fluorite in the area seems to be in an 1892 issue of a mining, gazette published in El Paso, Texas (The Bullion 1892). Post-World War II mining activities have brought the fluorites to greater attention in the mineral collecting community. There is a great article on the mines in the November / December 2003 edition of *Rocks and Minerals* magazine.

OK, what is so special about fluorite and in particular, the fluorites from the Blanchard Mine group? Fluorite is a common gangue mineral in hydrothermal veins, especially those containing lead and zinc minerals. That means it is found in literally thousands of locations world-wide. Its crystal form is pretty simple - isometric - and its chemical constituents are just calcium and fluorine. It is too soft for jewelry (hardness = 4), plus it has a truly well-defined cleavage plane that makes any sharp smack a potential crystal cleaver. (That cleavage plane can cause real damage if the crystals are subjected to thermal shock such as the one generated if a sun-warmed crystal is suddenly submerged in cold water "just to give it a little bath!") Given these facts, what is all the fuss about?

My answer to the question of what is so special is that fluorite has something for almost every mineral collector. It is beautiful and intriguing, the crystals are many times well defined with interesting variations and twinning, and there are numerous associations with other minerals. Good examples are not expensive and are available at any rock shop, on the internet or at mineral shows (although great pieces from desirable locations can be extremely pricey!!) Along with numerous other sites, the Blanchard Mine group produces fine pieces.

The first striking thing about fluorite from the Blanchard Mine is the range of color. The best known color is the intense teal "Blanchard Blue." There are other crystals that are a paler sky blue that seem to almost glow with the clarity of the color. Rarely the crystals are zoned in shades of purple that rival those from Illinois. There are also lovely greens. In my collection, I also have a completely colorless cube, some pieces that are combinations of green and blue and some that show beautiful zoning. As a word of warning, some of the intense blue crystals from the Blanchard mine area will fade quickly if exposed to any light source with a UV component, so it is best to keep them out of sun light and limit exposure to UV lamps. The other colors seem less prone to fading.

The second intriguing factor is the variety of crystal forms. The vast majority of the Blanchard Mine pieces are simple cubes, but rarely there are some crystals that exhibit octahedral, hexoctahedral or dodecahedral variants. Many of the more complex crystals show stepped development.

The pieces from the Blanchard Mine seem to be arranged by nature to be attractive. Many have pale white quartz matrixes that accent the vivid fluorite colors. There are associations with galena and other sulfides to add interest and the clarity of some of the crystals is outstanding. If beautiful fluorites with interesting forms and associations appeal to you, I would recommend that you check out those from the Blanchard Mine.



Modified "Blanchard Blue" fluorite cubic crystals



Modified octahedral, color zoned fluorite crystals on quartz from the Blanchard Mine Group

Reminder - Dues: . Dues are due and we are trying to update our membership roster. The dues are unchanged for 2010 - \$20 for individuals and \$25 for families. Please bring your check to a meeting or mail it to MSDC Treasurer Rick Reiber. 2121 Marlboro Drive, Alexandria, VA 22304. Please include your phone number and e-mail address so that we may contact you with club updates.

Upcoming Events: Start planning those spring trips now!

April 17-18: West Mifflin PA - 2010 Monongahela Rockhounds Gem Mineral and Fossil Show. April 17, 2010 10:00 am to 6:00 pm, April 18, 2010 10:00 am to 4:00 pm. Location: West Mifflin Volunteer Fire Company #4 Skyview Hall, 640 Noble Drive, West Mifflin PA 15122.

April 24-25: Franklin, NJ - 38th Annual NJ Earth Science Gem & Mineral Show (with Outdoor Swap) Co-sponsored by the Franklin-Ogdensburg Mineralogical Society, New Jersey Earth Science Association and Sterling Hill Mining Museum. Franklin School, Franklin, NJ

May 1-2: Topsfield, MA - 47th Annual New England Mineral & Gem Show sponsored by the North Shore Rock & Mineral Club. Topsfield Fairgrounds, Topsfield, MA

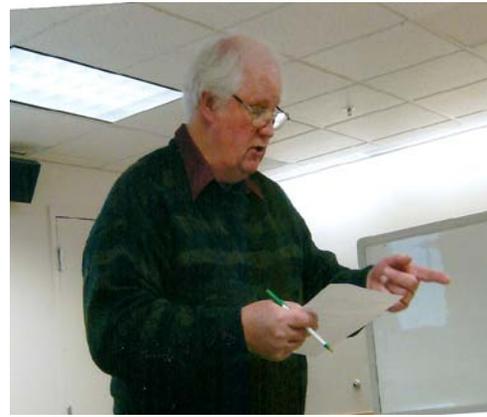
June 5: Macungie, PA - Spring Mineralfest sponsored by the Pennsylvania Earth Sciences Association. Macungie Memorial Park Building, Macungie, PA.

June 5-6: Birmingham, AL - ALWAYS the 1st full weekend in June! - 37th Annual Tannehill Gem, Mineral, Fossil, & Jewelry Show hosted by Alabama Mineral & Lapidary Society. Sat: 9 am to 5 pm; Sun: 9 am to 5 pm. Tannehill Ironworks Historical State Park. From Birmingham, take I-20/59 S. to Exit #100, or take Exit #1 off I-459 and follow signs. Show is FREE with paid admission to state park. Hourly door prizes & children's activities! Educational exhibits & demos! Outdoor show! Show contact: Gene Blackerby, 205-807-6777, Email contact: gene@lapidaryclub.com, <http://lapidaryclub.com>

June 26-27: Gilsum, NH - The town of Gilsum, located in the scenic Monadnock Region in southwestern NH, will once again host thousands of people from all over the U.S. who will attend the Gilsum Rock Swap and Mineral Show. More than 60 dealers, swappers, distributors, and collectors can buy, sell, or swap beryl, quartz crystals, semi-precious stones, and rocks and minerals of all sorts. The event takes place at the Gilsum Elementary School grounds, Route 10 in Gilsum, just north of Keene, NH, and is about 2 hours from Boston. Show hours are 8:00 AM to 6:00 PM Saturday and 8:00 AM to 4:00 PM Sunday. For more information please contact Rob Mitchell at the Gilsum Recreation Committee, P.O. Box 76, Gilsum, NH, 03448; call 603.357-9636; or send e-mail to gilsumrocks@gmail.com.

June 26-27: State College, PA - 5th Annual Nittany Gem and Mineral Show sponsored by Nittany Mineralogical Society, Inc., at Mt. Nittany Middle School, 656 Brandywine Drive, State College PA 16801, near the Oak Hall exit of US Route 322 east of State College. Vendors of minerals, lapidary materials, gemstones, jewelry, beads; expert speakers, hands-on activities, demonstrations, displays, Best of PA mineral specimen contest, club silent auctions including kids' sections, field trips, good food. Saturday 10-6, Sunday 11-4.

MSDC's March Meeting: Members and friends at the meeting. (Pictures courtesy of Cynthia Payne)



President Andy Thompson calls the meeting to order



Don Greaves and Dave Nanney examine some of Don's new additions to his fossil collection



New members Mark Dahlman and Andy Muir along with George Loud wait for the meeting to start