Micromineralogists of the National Capital Area, Inc.

MNCA Website dcmicrominerals.org

The Mineral Mite

Vol. 50 – No. 6 **Washington D.C. – A Journal for Micromineralogists** **June 2017**

50 Years 1967 - 2017

June 28 Time: 7:30 p.m. – 10 p.m.

Long Branch Nature Center, 625 S. Carlin Springs Rd. Arlington, VA 22206

Program: "Bisbee Arizona: Queen of Arizona's Copper Camps and King of Arizona's Mineral Localities"

By David Fryauff, Vice President

DVD presentation (2012 Dallas Mineral Collecting Symposium) by Les Presmyk who has specialized in Arizona minerals since 1980 and is an authority on the history of Arizona mining, particularly that of the Bisbee District. Members are requested to bring in their favorite Bisbee Arizona specimens for show & tell.

The remaining half of the meeting time will be a micromount workshop with free excess material from 4 recent (spring 2017) field trips: 1) Gettysburg Teeter's quarry, 2) Manassas quarry, 3) National Limestone quarries #1 & #2 in Snyder Co., PA, 4) Vulcan Garrisonville Quarry, Stafford VA.

Photo of the Month

Fluorite Elmwood Mine, Gordonsville, TN

President's Message:

By: Dave MacLean

First, I wish all of us a safe and enjoyable summer. As we hunt for micros and macro minerals, I am aware of the need to look in the regoliths, crumbles and left-over bits and pieces of rock and even sand for some attractive crystals. I remember Betsy Martin gathering up the small leftovers from tourists sieving "gems" from the Rutherford mine and finding lots of micros. Paul Smith found all kinds of interesting quartz crystals in the bitty leftovers at a quartz crystal mine in Arkansas. Scott Braley found cassiterite crystals in crumbly weathered schist in Australia.

When somebody gave me some pieces of quartz containing zircon and thorite from near Colorado Springs, CO, I asked what did this person find in the regolith and gravel there. The reply was "I did not look in the regolith and gravel". Likewise, when I asked somebody about the minerals like zircon in the gravel at the bottom of a weathered granite cliff, the gravel had not been examined. Regolith or the leftovers of weathering or chemical breakdown of rocks without additional tumbling and rounding may contain some interesting micros.

We meet again on Wednesday 26 September 2017. The NVMC show at GMU Johnson Center is Saturday-Sunday 18-19 November 2017. We have an opportunity to show the wonders of micro minerals.

By November we must nominate and in December elect our 2018 officers. We will need a nominating committee.

Previous Meeting Minutes: 5/24/17

By: Bob Cooke, Secretary

President Dave MacLean called the meeting to order at 7:50 PM May 24, 2017 at the Long Branch Nature Center, Arlington, VA. No past presidents or guests were present. Eight members were present. Minutes of the April 2017 meeting were approved as recorded in the Mineral Mite. Michael Pabst reported the Treasury balance. Members discussed an immediate prorated disbursement, but no formal motion was made.

Old Business: None.
New Business: Kathy Hrechka announced planning activities for the 2018 Atlantic Micromounters Conference. She has requested a reservation from the Marriott Hotel for April 6 & 7, the weekend after Easter 2018.
Dave MacLean expressed interest in MNCA having a demonstration table at the NVMC/GMU Mineral Show on November 18/19.

Announcements: Dave Fryauff discussed upcoming field trips of the GLMC-MC to which MNCA members are invited.
*May 27 - Vulcan Quarry Manassas, VA Meet at 6:30 AM at Vulcan Materials Quarry, 8537 Vulcan Lane, Manassas, VA 20109
*June 3 - National Limestone Quarries #1 & 2 Middleburg & Mount Pleasant Mills, PA Meet at 8:30 AM at National Limestone Quarry #1, 3499 Quarry Rd, Middleburg PA
*June 17 - Vulcan Quarry Stafford, VA Meet at 8 AM at Vulcan Materials Quarry, 100 Vulcan Quarry Rd, Stafford, VA Note: This quarry is located off Garrisonville Rd and is sometimes referred to as the Garrisonville Quarry.

Group discussion indicated interest in a trip to the Morefield Gem Mine in Amelia, VA. Betsy Martin was identified as a point-of-contact.
Dave MacLean and Bob Cooke both stated they would not be available for the June meeting. Dave Fryauff agreed to chair the meeting and arrange for minutes to be recorded. The meeting adjourned at 8:20 PM.

Membership Dues are Due: 2017
Single = $15. Family = $20.
Payable to MNCA - Michael Pabst, Treasurer
270 Rachel Drive Penn Laird, VA 22846

Geo Field Trips:

By Dave Fryauff

Thanks, and remember MNCA is invited to come out for the GLMSMC-organized collecting trips scheduled for June 3rd (National Limestone, Snyder Co., PA) & June 17th (Vulcan Garrisonville Quarry, Stafford VA). Good hunting & be safe!!!

Dave MacLean viewing fluorite at MNCA meeting

Previous Program Reviewed: 5/24/17

At our May meeting, we watched Cave-in-Rock, "The Illinois Fluorite District" by Alan Goldstein (a DVD recording from the Dallas Symposium). Michael Pabst added some of his minerals & Fluorescence from that locality. He also wrote a brief summary of what he presented, along with photos of fluorescing fluorites from Illinois. Turn to next page.

Cave-in-Rock, Hardin County, Illinois

By Michael Pabst, Ph.D.

To augment our May meeting DVD presentation, "The Illinois Fluorite District" by Alan Goldstein, I delved into my collection and selected Cave-in-Rock specimens that I purchased long ago. After washing them with Windex and distilled water, I was pleased to see that they still looked nice. Even better, they were all fluorescent!

Fluorite (CaF_2):

Fluorite (purple, CaF_2), Galena (Gray, PbS), Sphalerite (Brown, ZnS) and Quartz from the Mahonning Mine, Cave-in-Rock, IL. FOV 90 mm. Visible light.

Close-up of specimen above. FOV 45 mm. Visible light.

Fluorite (blue) from Mahonning Mine, Cave-in-Rock, IL. FOV 50 mm. Visible light.

Fluorite, Minerva Mine, Hardin County, IL. FOV 140 mm. Visible light.

Yellow Fluorite specimen above with long-wave ultra-violet light.

Strontianite ($SrCO_3$):

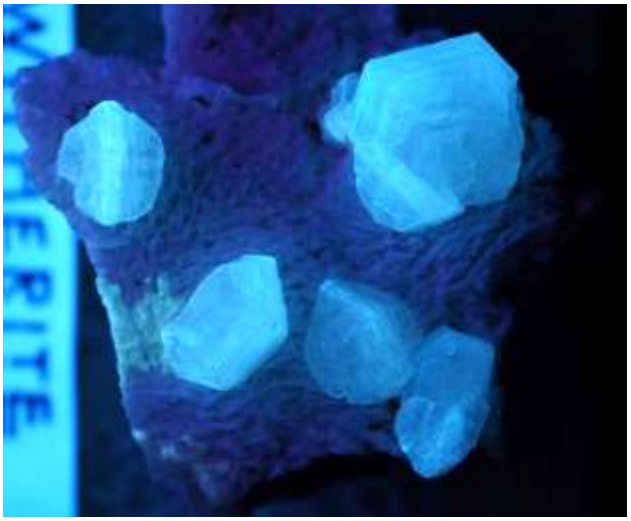
Strontianite, Inverness Mine (Minerva), Cave-in-Rock, IL. FOV 35 mm. Visible light.

Strontianite above with short-wave ultra-violet light. (Looks similar with long-wave).

Witherite ($BaCO_3$):

Witherite from Minerva Mine, Cave-in-Rock, IL. FOV 67 mm. Visible light.

Witherite from Hardin County, IL. FOV 24 mm. Visible light.



Witherite above with short-wave ultra-violet light. (Long-wave looks similar.)

None of these specimens are exceptional, except perhaps the first one, coming from my early poorer days, but they were still a pleasure to look at again.

Photomicrography by Michael Pabst

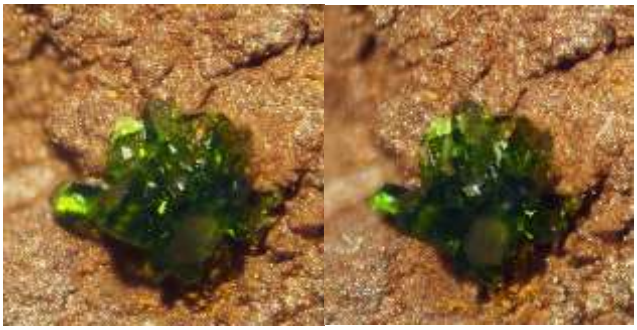
Lindgrenite and Szenicsite

By Michael Pabst Ph.D.

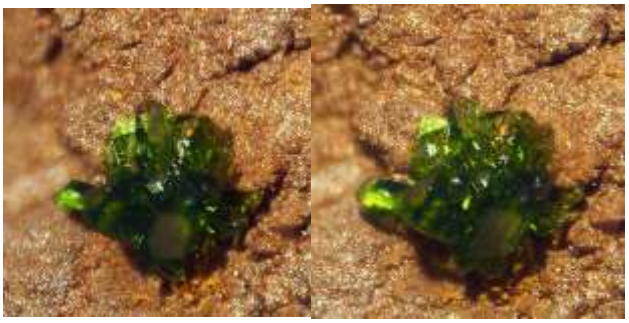
Lindgrenite: One of the prettiest molybdate minerals is Lindgrenite, a basic copper molybdate, $Cu_3(MoO_4)_2(OH)_2$. Lindgrenite is monoclinic 2/*m* - prismatic, with $\beta = 98.38°$. With only one mirror plane and one 2-fold axis of rotation, crystals have low symmetry and display an interesting variety of forms (seven of which can be found on the www.mineralienatlas.de website). The best crystals come from the Atacama Desert in Chile, but lesser specimens occur in several locations in Arizona. Here is a link to Mindat showing one of Stephan Wolfsried's photos of Lindgrenite: www.mindat.org/photo-761724.html.

Lindgrenite from Chuquicamata mine, Calama, Antofagasta region, Chile. FOV 1 mm. Photo by Michael Pabst, taken through stereo microscope with Olympus OM-D E-M5 Mark II camera, stacking 6 images.

The next photos show a little bundle of Lindgrenite crystals that are awesome under the stereo microscope. To capture the 3D effect, I have provided two sets of stereo pairs to help you visualize the Lindgrenite bundle in 3D. The first set is the conventional parallel view, with the left picture on the left and the right picture on the right. The second set is the cross-eyed set, with the left picture on the right, and the right picture on the left; when you cross your eyes, you see the 3D effect.



Lindgrenite from Chuquicamata mine, Calama, Antofagasta region, Chile. FOV 1 mm.
Stereo pair, parallel view. Photos by Michael Pabst, taken with stereo microscope, stacking 7 images from each eyepiece separately.



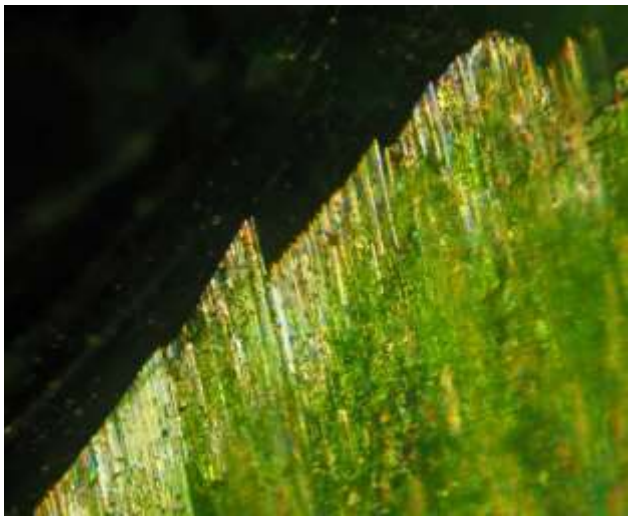
Lindgrenite from Chuquicamata mine, Calama, Antofagasta region, Chile.
Stereo pair, cross-eye view.

Lindgrenite was described in 1935 by Charles Palache from the Chuquicmata mine in the Atacama Desert. Lindgrenite was named after Waldemar Lindgren, a Swedish-American geologist.

Szenicsite: The Atacama Desert is 1000 km long. South of Chuquicamata by 700 km is Inca De Oro, where another copper molybdate, Szenicsite was discovered by Terry Szenics in the early 1990's. Some secrecy and bogus locality information clouds the early history of Szenicsite.

Szenicsite $Cu_3MoO_4(OH)_4$ is orthorhombic, with a pearly luster. Described officially in *Mineralogical Record* in 1997: Francis CA, Pitman LC, Lange DE: Szenicsite, a new copper molybdate from Inca de Oro, Atacama, Chile. *Mineralogical Record* **28**: 387-394 (1997). Euhedral crystals of Szenicsite have not been found. Terminated crystals are rare. Sheets of parallel crystals with rough edges are the usual habit. Some people say that the color of Szenicsite differs from that of Lindgrenite, but such a difference is not obvious to me. I have photos of two specimens of Szenicsite; with each specimen, there is a photo of the entire specimen as well as a close-up.

Szenicsite from Jardinera No. 1 Mine, Inca de Oro, Chañaral Province, Atacama Region, Chile. FOV 7 mm. Photo by Michael Pabst.



The previous photo is a close-up from the previous specimen of Szenicsite from Inca de Oro, showing the "termination(s)" of a Szenicsite crystal (or sheet of crystals). (Perhaps, more accurately, the point of collision of a Szenicsite crystal with the darker green side of another crystal.) FOV 1 mm. Photo by Michael Pabst.

The next two photos show another specimen of Szenicsite, which is lightly scattered on Brochanite. Brochantite was the principal copper ore mined at the Jardinera No. 1 mine, which is unusual.

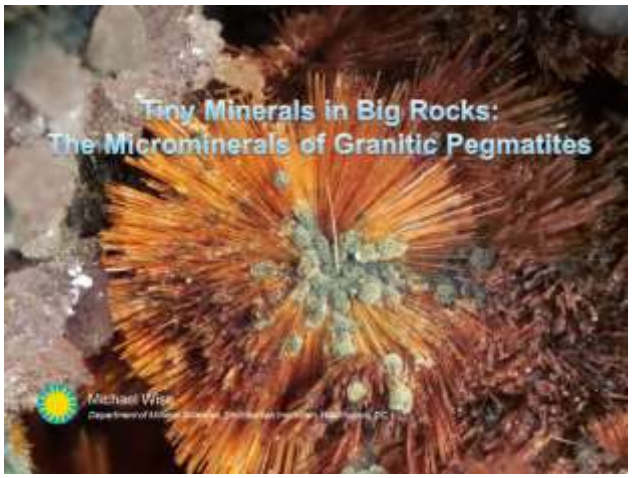
Another specimen of **Szenicsite** (scattered light green crystals) on Brochantite (green) from the Jardinera No. 1 mine. FOV xx mm. Photo by Michael Pabst.

Close-up of the previous specimen of **Szenicsite** (light green) on Brochantite (green), with a few crystals of Cuprite (red) in the center. FOV xx mm. Photo by Michael Pabst. One of my favorite Mindat photos of Szenicsite, which is in this case associated with green Cuprian Powellite $(Ca,Cu)MoO_4$, is: www.mindat.org/photo-148648.html.

This is a beautiful specimen and photograph. We will continue with Powellite in the next installment.

Tiny Minerals in Big Rocks: The Microminerals of Granitic Pegmatites

Presented by Dr. Michael A. Wise, Department of Mineral Science, Smithsonian Institution
Atlantic Micromounters' Conference April 1, 2017
By Dave MacLean



A pegmatite is defined as a course to gigantic grained igneous rock. The gross composition of a granitic pegmatite is much like the host granite.

Igneous rocks vary in crystallite size in ascending order include: obsidian <1mm, rhyolite, graphic granite, granite 0.5-3mm, pegmatite 1mm to 5 meters.

There is no consensus among geologists on the mechanisms for pegmatite formation. The granite is the result of slow crystallization from melted rock. After the bulk of granite with primary minerals quartz, feldspar (orthoclase and some albite) and mica (muscovite and biotite) has crystallized, there are pockets of hydrothermal fluids remaining encapsulated in a finer grain graphic granite. The surrounding rock can be granite such as South Platte and Crystal Peak, CO or schist, Keystone, SD. A pegmatite pocket full of hydrothermal fluid very often connects with and develops satellite hydrothermal pockets such as at Keystone, SD and South Platte, CO.

The 650 different crystalline minerals such as feldspars albite and orthoclase, tourmaline, lepidolite, beryl, fluoroapatite, phosphates amblygonite triphylite, lithiophyllite, micas muscovite and biotite, spessartine garnet, cassiterite, columbite Ta etc. form directly from the hydrothermal fluids. The temperature and pH (acidity or alkalinity) of the fluids determine which minerals form and the order in which they form. Dr. Wise said that crystallization of minerals in a pegmatite pocket can occur in as short of time as one year. As minerals crystallize in a pocket, the fluid composition changes including but not limited to acidity and/or alkalinity possibly altering the minerals which have already crystallized.

Hydrothermal fluids from outside a pocket can change either the composition of and/or the acidity or alkalinity and/or oxidizing ability EOx, or temperature of the hydrothermal solution changing the already crystallized minerals and the minerals yet to crystallize. For example, Cr+3 entering the hydrothermal fluid in a pocket can make beryl green as emerald. Dr. Wise gave examples of minerals found at different fluid pH's e.g. very acidic pH 2-3 beryl and quartz, weakly acidic pH 4-5 phenakite and euclase, neutral pH 7 bertrandite, weakly alkaline pH 8-9 bavenite, and very alkaline pH 10-11 epidymite and eudidymite.

By comparison human stomach acid is pH 2, household vinegar pH near 3, water in contact with ambient air pH 5.5 from dissolved CO2, human blood pH 6.7, and sea water pH near 8. Other minerals from internal and externally caused hydrothermal fluid alterations include feldspars, micas, garnet, beryl, tourmaline, Nb-Ta oxides and phosphates.

There are approximately 200 secondary phosphate minerals in pegmatites. Their formation begins at 500-600 C with triphylite, lithiophylite, and montebasite at 300-500 C hydroxylation occurs and at 100-300C triphylite LiFePO4 loses lithium with oxidation of Fe+2 to Fe+3 and hydroxylation and hydration to minerals such as heterosite and purpurite, and then childrenite, vivianite, beraunite, and rockbridgeite.

Other pegmatite secondary minerals include are siderite, barite and rhodochrosite. Sulfides include loellingite FeAsS, sphalerite, pyrite, and molybdenite.

Dr. Wise showed slides of many microminerals found in pegmatites. Turn to next page for some examples.

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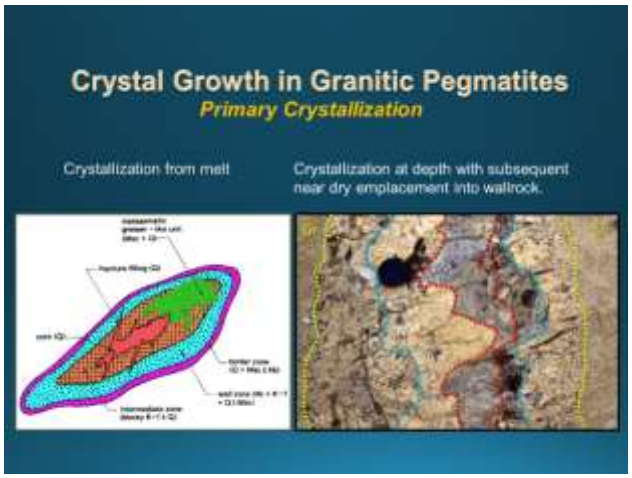
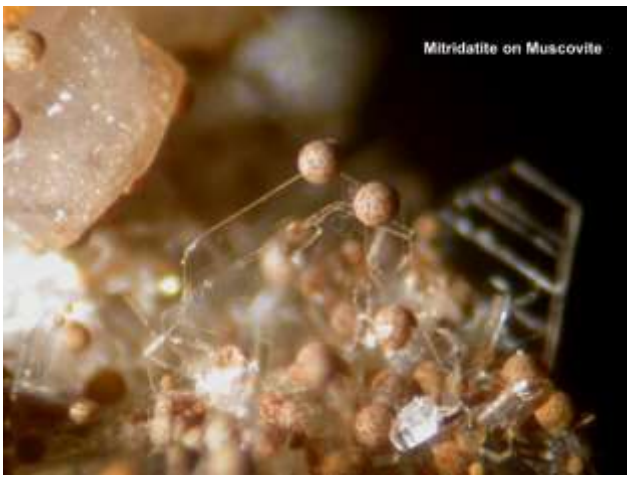




Newly-Identified Members of the Microlite Group from the Rutherford Mine Pegmatite #2, Amelia Courthouse, Virginia

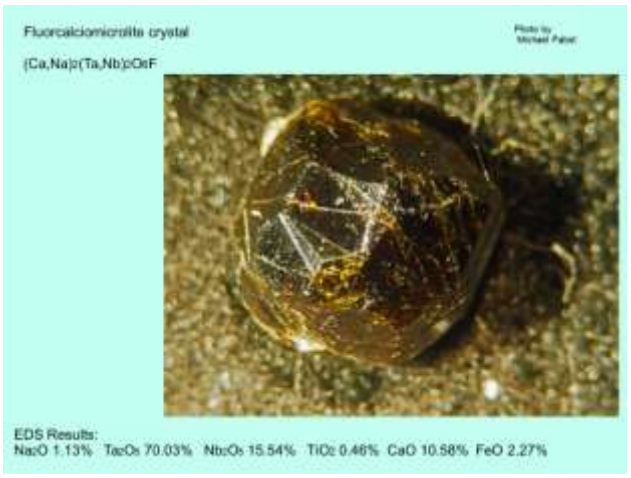
Presented by J. Scott Duresky
Atlantic Micromounters' Conference
April 1. 2017
By J. Scott Duresky

Introducing the Pyrochlore Super Group:
In July of 2010, as reported in the *Canadian Mineralogist*, the International Mineralogical Association (IMA) announced a change in nomenclature for the Pyrochlore Supergroup of Minerals. Because of this decision, "Microlite" and "Pyrochlore" were discredited as individual species, with both the Microlite and Pyrochlore Groups being re-organized as members of the new Supergroup. These changes were reflected in the 2014 Edition of Fleischer's Glossary of Mineral Species.

For many number of years, I had already been thoroughly researching and studying the minerals which occurred in the Rutherford Mine pegmatite, and with many samples in my personal collection, I had an immediate interest in determining which of the eleven species in the newly-organized Microlite Group occurred in the pegmatite.

To begin the process of identifying these members, I began working with Tony Nikischer of Excalibur Minerals in 2016, to tentatively identify selected samples using Energy Dispersive X-Ray Spectroscopy (EDS), which is a chemical microanalysis technique used in conjunction with Scanning Electron Microscopy (SEM). Although this type of testing is not definitive in identifying minerals containing the hydroxyl group (OH) or water (H_2O), it was successful, pending further testing, in tentatively identifying four members of the group:

Fluorcalciomicrolite $(Ca,Na)_2(Ta,Nb)_2O_6F$, which was the dominant member of the group that occurred in the pegmatite, and which represents the first time that this species has been reported from a U.S. locality. Fluornatromicrolite's corrected chemical formula, is reported by Tony Nikischer, of $(Na,Ca,Bi)_2Ta_2O_6F$.



Kenoplumbomicrolite; (Note: Insert the chemical formula from Mindat, and refer to the fact that the rectangle symbols in the chemical formula represent vacant spaces in the structure of the mineral). This is likely the rarest of the newly-identified species that occurred in the pegmatite, with the only other known worldwide localities found at various locations on the Kola Peninsula of Russia.

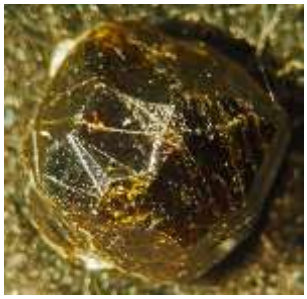
Oxycalciomicrolite $Ca_2Ta_2O_6O$; This is a possible new mineral species that has not yet been confirmed by the IMA, with initial studies being done on samples from the Brazilian type locality, which so far is the only other known world-wide locality. Although rare, it appears to be the most common variety of Microlite that was found at the Rutherford Mine, after Fluorcalciomicrolite.

In addition, EDS testing revealed that one of the samples represented one of the members of the newly-organized Pyrochlore Group.

The single example tested has been tentatively identified as Oxycalciopyrochlore, with a chemical formula of $Ca_2Nb_2O_6$, and represents the first time that this species has been reported from a U.S. locality.

With the generous assistance of Dr. Michael Wise of the Smithsonian, further testing is being done on a large and representative group of samples from the Rutherford pegmatite to make a more definitive analysis of which members of the Pyrochlore Supergroup were present. It is possible that a professional paper may come out of these studies.

My personal acknowledgements go to Michael Pabst of the MNCA, who worked very hard with me in putting together the Power Point presentation, and whose high-quality photomicrographs lent great beauty to it. Also, through the generosity of Pete McCrery, of the Richmond Gem and Mineral Society this presentation became possible.



Fluorcalciomicrolite from the Rutherford Mine Pegmatite #2 in Amelia Courthouse, Virginia. This has been tentatively identified via Electron Dispersive Spectroscopy (EDS), and appears to be the dominant member of the Microlite Group that occurred in the Rutherford pegmatite. It represents the first reported U.S. locality for this mineral species.

Fluornatromicrolite This was one of the rarer Microlite Group species that has been tentatively identified via EDS as having occurred in the pegmatite. Generally yellowish in appearance, this species is difficult to distinguish from Fluorcalciomicrolite without further chemical analysis.

Fluorcalciomicrolite This amber-red variety was extremely rare, with its unusual color due to the trace Iron that was found when this sample was tested with EDS. Several faceted examples of this variety, demonstrating a high index of refraction, are in the collections of the Smithsonian Institution.

Oxycalciomicrolite This represents a possible new species that has not yet been confirmed by the International Mineralogical Association (IMA), with current studies being done on samples from a single Brazilian pegmatite, which right now represents the only other reported worldwide locality for this possible new species. **(**Tentatively identified via EDS testing.**)** Although this was rare in the Rutherford pegmatite, my current and ongoing studies indicate that this may have been the most common of the newly-identified members of the Microlite Group, after Fluorcalciomicrolite.

Photomicrography by Michael Pabst

Background Information and Evolution of Scott Duresky's presentation on the "Newly-Identified Members of the Microlite Group from the Historic Rutherford Mine Pegmatite #2, Amelia Courthouse, Virginia" is on the next page.

Scott Duresky Biography

Background Information and Evolution of Scott Duresky's presentation on the "Newly-Identified Members of the Microlite Group from the Historic Rutherford Mine Pegmatite #2, Amelia Courthouse, Virginia"

The story began on a sad and desperate day in the spring of 1986, when I was forced to sell my entire Rutherford Mine collection to a gentleman from the Midlothian Earth Sciences Association for $850.

This was an outstanding and comprehensive collection that I had amassed over roughly 110 visits between the late 1960's and late 1970's, and after doing so, I truly thought that my collecting days were over, and they might have been, except for a chance encounter in rural Lancaster Co., Pennsylvania in 1993.

Looking for something relaxing and calming to do, I attended a star party where I noticed that the bearded and barrel-chested fellow with the biggest telescope not only had the longest lines, but was the friendliest in taking the time to help children and their families to see the objects that were in his scope. Naturally, I was drawn to him myself, and after discovering that he was also a professional mineral collector, I never left his side.

When I went to the star party the following year, I had already met the woman who was to be my second (and current wife), and at that point, this gentleman and I initiated a friendship which primarily involved field collecting in quarries and other mineral localities to which he had exclusive access. Since I had little room to store the minerals I collected (many of which were particularly fine examples of the minerals Pennsylvania is known for), I renewed my relationship with the proprietor of a rock shop in Midlothian who I had first met during my early collecting days at Rutherford. During my trips to the Richmond area, I began selling many specimens to him that I had personally collected, and over the course of time, our relationship progressed from vendor-customer to vendor/friends.

"Annual Crusher Run" at Frazier's Limestone Quarry, Harrisonburg, VA

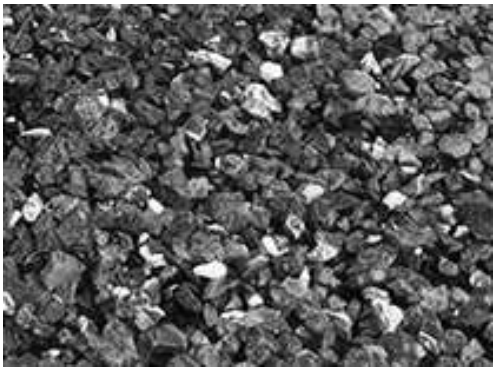
By Tom Tucker

Currently as we find it more and more difficult to gain access to active quarries it's refreshing to read these instructions among the "guidelines" for participants in the Annual Crusher Run, at a Frazier's Limestone Quarry just north of Harrisonburg. The 5-K run had 205 participants last year in miserable cool wet weather. No, I don't make the run, but my daughter does. Among the noted instructions to participants:

"The 5K takes place in an active quarry, which means safety is of utmost importance. We ask that participants abide by all course marshal instructions, and beware of course markings, and not climb on rock piles or equipment.

Bring the kids for the Kids Dig! We'll hide a bunch of cool stuff in a huge pile of rocks and let the kids dig through it. Shovels/rakes will be provided and this area will be open before, during and after the run."

In this day and age, it's refreshing to see a major industrial activity make an active effort to involve and educate the general public, and participate in the "community". This is a very large limestone quarry, not yet a "mindat" locality, but I think I can safely state that calcite, and probably fluorite can be found there. I'll have a look in the "Kid's Rock Pile" this Saturday.



http://www.frazierquarry.com/products

Visiting George Loud: Hilton Head, SC

By Kathy Hrechka, Editor

I recently visited George at his home, admiring his mineral collection. He described the following…

Count on Kathy to pick out a diamond to photograph. The diamond (in the box with the red lining) measures about 6 X 4 mm. It has no crystal definition, which is true of most Arkansas diamonds. I have seen a very few diamonds from Arkansas with some crystal definition but, as with all "Arkansas" diamonds, one must always consider the possibility that the diamonds are not really from Arkansas. As seen in the photograph, this diamond came with a certificate of authenticity but, having read accounts of certain individuals taking diamonds into the Crater of Diamonds later to be found, a certificate may not mean anything. Without a thorough examination and analysis, the value of the stone depends upon the integrity of the "finder."

The Columbite-Tantalite in the foreground measures 5 X 4 X 2.5 cm. The Topaz (Powhatan county, not Amelia) measures 5.0 X 4.2 X 4.0 cm. The "Amazonite" in the background is a well-defined, almost complete crystal. "Amazonite" is very common in the Amelia area pegmatites but well defined, complete crystals are relatively rare.

This photograph shows a portion of one of three shelves of Centreville Quarry (Fairfax Plant of the Luck Company) specimens. The specimen seen in the upper right of the photograph is a plate with the displayed surface completely covered with green Quartz, the coloration of the Quartz being due to inclusions of Actinolite ("Byssolite").

American Federation of Mineralogical Societies

(AFMS)
www.amfed.org

Eastern Federation of Mineralogical and Lapidary Societies

(EFMLS)
www.amfed.org/efmls

Communication and Involvement Are the Keys to Our Success!

AFMS Show & Convention June 9-11 in Ventura, California

An Invitation to Exhibit at This Year's National Show On behalf of the Ventura Gem & Mineral Society, I invite you to exhibit in this year's national AFMS Show & Convention taking place June 9-11 in Ventura, California. Enter either a competitive or a noncompetitive display—or one of each! Go to the show website at <2017CFMS-AFMSShow. com> to access and download entry forms by clicking on "Files and Entry Forms." You'll also find a direct link to the AFMS Uniform Rules manual. The deadlines are May 22 for noncompetitive entry forms and April 30 for competitive forms, so don't delay.

Exhibiting is fun! When displaying at a gem show, we not only get to show off our collections and handiwork but also to learn from others, seeing display techniques, getting advice, sharing tips, and forging bonds of friendship through mutual interests. There is a host of trophies for adult exhibitors, including a special trophy for nervous first-time Novice Exhibitors sponsored by the hosting Ventura society.

Kids entering either competitive or noncompetitive displays can earn the Showmanship badge in our AFMS/FRA Badge Program, and those entering competition can strive for both trophies and the AFMS Lillian Turner Award. Several years ago, Lillian Turner of Bethesda, Maryland, generously donated funds to support an award for the best junior's exhibit at the annual AFMS Show. The award consists of a certificate, a $100 bond, and a mineral specimen and is presented at the Show Awards Ceremony. I guarantee that adults and kids who choose to display in Ventura will find the experience both rewarding and fun!

By: Jim Brace-Thompson, CFMS/AFMS Show Publicity Chair

Geology Events:
June

28: MNCA Meeting
Long Branch Nature Center in Arlington, VA
7:45 – 10 pm
26: NVMC Meeting Long Branch Nature Center in Arlington, VA 7:45 – 10 pm

EFMLS Wildacres' Workshops

Fall Session: Tim Morgan
Gem & Bead Educator
September 4 – 10, 2017

EFMLS has been holding workshops at the Wildacres Retreat since 1973; over the years, our sessions have grown in both content and variety. Your fee gives you access to one or two of the classes being offered during the week. Instructors volunteer their time and talents to teach our classes. Most have been with us before and are outstanding! Cost $410. week.
For fall, our lineup of classes is:
4-day classes:
• Faceting—Steve Weinberger
• Photography storytelling—Bruce Gaber

2-day classes:
• Chainmaille (basic & continued)—Roger Campbel • Intarsia (beginning)—John Milligan • Silversmithing (basic and intermediate)—Richard Meszler • Wirewrapping (basic and continued)—Jacqueline Campbell

Descriptions of each of the classes are listed on the EFMLS Wildacres Workshop Website. You can find registration forms there as well. Or you can find the description in the February 2017 issue of EFMLS News, page 11, and the registration form on page 12.
encourage interest in geology, mineralogy, and related sciences.
Questions: contact Suzie Milligan, Registrar
smilligan@stny.rr.com 607-687-5108
Pam Bryant, Director pjbryant@juno.com 804-457-4698
Registration on EFMLS website, Wildacres tab

50th Anniversary – GOLD
We Want to Hear How You Became Interested in Micromounting!

50th Anniversary MNCA 1967-2017

As part of our 50th Anniversary publication, (due this fall) please write a paragraph or two on how, and when you began "Micromounting."

Simply include:
* Your profession / retired
* Year you began micromounting
* Who inspired you?
* Why you are a micromounter?
* Something unique about you

Submit to Kathy kshrechka@msn.com

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AGI american geosciences institute

GeoWord of the Day and its definition:

loughlinite (lough'-lin-ite) A pearly-white, asbestiform mineral of the *sepiolite* group: $Na_2Mg_3Si_6O_{16}•8H_2O$. It is the Na analogue of sepiolite with Na in place of octahedral Mg.

redingtonite (red'-ing-ton-ite'') A silky white or purple mineral of the *halotrichite* group: $(Fe^{2+},Mg,Ni)(Cr,Al)_2(SO_4)_4•22H_2O$. It has not been adequately characterized.

rhodite (rho'-dite) A rhodium-bearing (about 40%) variety of gold.

All terms and definitions come from the

Glossary of Geology, 5th Edition Revised.

GeoWord of the Day is brought to you by: Rayfract! Check them out at rayfract.com.

Micromineralogists of the National Capital Area
Meeting: The 4th Wed. of each month 7:30 -10 p.m.
Long Branch Nature Center, (Except Easter & Dec.)
625 S. Carlin Springs Road, Arlington VA 22204

MNCA Purpose: To promote, educate and encourage interest in geology, mineralogy, and related sciences.

Pres: Dave MacLean, dbmaclean@maclean-fogg.com
Vice Pres: David Fryauff, fryauffd@yahoo.com
Secretary: Bob Cooke, rdotcooke@verizon.net
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The society is a member of:
* Eastern Federation of Mineralogical and Lapidary Societies (EFMLS) www.amfed.org/efmls
*American Federation of Mineralogical Societies (AFMS) www.amfed.org Affiliation

Dues: MNCA Membership Dues for 2016
$15 (single) or $20 (family)
Payable to MNCA - Michael Pabst, Treasurer
270 Rachel Drive
Penn Laird, VA 22846

S.C.R.I.B.E.

Editor's Note:
By
Kathy Hrechka

Send your articles and photos to your editor.
Club Article Deadline is 5th of each month.
***The Mineral Mite* will be emailed on 10th.**
No newsletter July/August

EFMLS Editor's Award
First Place 2016 - Small Bulletins

Member inputs:
* Dave MacLean
* Michael Pabst
* Bob Cooke
* Scott Duresky
* David Fryauff
* George Loud
* Tom Tucker
* Kathy Hrechka