



MNCA Website dcmicrominerals.org
The Mineral Mite



Vol. 48 – No. 8 **Washington D.C. – A Journal for Micromineralogists** **October 2015**

October 28 Time: 7:30 p.m. – 10 p.m.

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

**Program: The Beauty of Carbonates
dvd by photographer Jeffrey Scovil**

By David Fryauff, Vice President

David will present Jeffrey Scovil's dvd "The Beauty of Carbonates" which was presented at the Midwest Federation Geo Fair in 2012. Scovil features unusual calcites, as well as an interesting selection of unusual smithsonite localities.



Workshop: Club members, bring a dozen of your carbonate micros to pass around for "viewing only" to the meeting.

President's Message:

By: Dave MacLean

We have an opportunity to share our love of micro mineralogy with the interested public at the NVMC show Sat-Sun 21-22 November. We need volunteers to run our demo table. Please either let me know by email or sign up at our Wed 28 October meeting.



In the past we attract many children and fewer adults to look at the wonders of minerals with a loupe or microscope. Let's keep doing sharing our passion.

Honoring **Cynthia's 95th birthday October 21**, this month's program is timely, as she collected calcites, and volunteered at the Smithsonian for many years. Happy Birthday!

Cynthia welcomes you to her "all day special birthday party". If you are unable to attend in person, and want to send her a card, mail it to:

Cynthia Payne
at Brighton Gardens #321
5550 Tuckerman Lane
North Bethesda, MD 20852

Cynthia decided to hire Irene, as her personal nurse, due to her ALS condition progressing.

Turn to pages 6-8 for a narration by Cynthia in 1997, and photos from our MNCA archives, which were organized by Cynthia.

**Photo of the Month
Cynthia Czapek Barnes Payne**



Previous Meeting Minutes: 9/23/15

By: George Reimherr, Secretary

Vice president David Fryauff opened the meeting at 8:18 p.m. Six members and one guest were present. The minutes for the previous month's meeting were approved, as published in the Mineral Mite. There was no verbal treasurer's report, as the treasurer was not present at the meeting; however, the treasurer had given a brief summary of the club's finances via e-mail.



Old business -- none

New business -- none

Announcements -- Three upcoming mineral shows were mentioned -- The Franklin - Sterling Hill, New Jersey show on September 26-27; The Paul Desautels micromount symposium on October 9-11; and, the NVMC show on November 21-22.

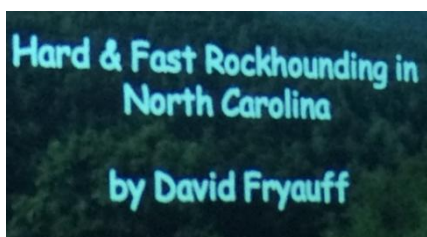
The business meeting ended at 8:29 p.m.

Previous Program Reviewed 9/23/15

By: George Reimherr, Secretary

Program -- David Fryauff gave his program titled "Hard & Fast Rockhounding in North Carolina", in which he discussed his recent mineral collecting activities at the Foote Mine dumps, Kings Mountain, Cleveland County, North Carolina, and at the mine dumps in the Spruce Pine, North Carolina area.

Photos by Sheryl Sims



Mottramite and Descloizite

By Michael Pabst

I don't think we will find any new vanadates that are more beautiful than Vanadinite, which was the subject of my last article. However, there are many more interesting vanadates to consider.

Mottramite and Descloizite are lead copper vanadates. Mottramite is $\text{PbCu}(\text{VO}_4)(\text{OH})$, and Descloizite is $\text{Pb}(\text{Zn,Cu})(\text{VO}_4)(\text{OH})$. So these minerals are chemically similar ($\pm \text{Zn}^{2+}$), and both are orthorhombic dipyramidal (*mmm*) (three mirror planes, meaning that the crystals are symmetrical front-to-back, top-to-bottom, and right-to-left). However, typical specimens of Descloizite differ considerably in appearance from typical crystals of Mottramite. Mottramite crystals tend to be small and usually cluster in sub parallel groups, whereas Descloizite often forms larger crystals and groups. Mottramite crystals are dark green or brownish black, reflecting the combination of red or orange V^{5+} and green or blue Cu^{2+} . In Descloizite, colorless Zn^{2+} replaces more than half of the Cu^{2+} , letting V^{5+} be more dominant, and yielding an orange, red or brown color.

Descloizite was named for Alfred Lewis Oliver Legrand Des Cloizeaux (1817-1897), who was Professor of Mineralogy at the University of Paris and who first described the mineral. Mottramite was named for a locality where ore was stockpiled at Mottram St. Andrew, Cheshire, England.

The first photograph below I took about 35 years ago with a Minolta camera, bellows, and Kodachrome slide film. I was going for the dramatic backlighting effect. The orange and red shine out. A real mineralogist might think the effect is overdone, but I was younger then, and I since I am still not a real mineralogist, I still like it. When I bought this specimen, the label said it was from Tsumeb, Namibia, but I think that location is unlikely, because Descloizite is rare at Tsumeb, and crystals this large and this light in color are not typical of Tsumeb. I believe the true location is the classic Descloizite location of Berg Aukas Mine, Grootfontein district, Otjozondjupa region, Namibia, which is about 60 km southeast from Tsumeb.



Descloizite from Berg Aukas Mine, Namibia. Field of view 8 mm.

The picture below is a new digital photo of the entire specimen. This photo is less artistic, and more like a mug shot. I do not know the identity of the yellow stuff at the base.



Descloizite from Berg Aukas Mine, Namibia. Field of view 20 mm.

The Mottramite specimen on the next page is really from Tsumeb. It features Mottramite (green) and Mimetite (yellow), $\text{Pb}_5(\text{AsO}_4)_3\text{Cl}$. It would not be surprising to find a bit of (VO_4) in the Mimetite,

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because Mimetite and Vanadinite form a series, and the Mimetite is surrounded by a vanadate (Mottramite). The three-dimensional architecture of this specimen is striking. It features yellow Mimetite prisms and sea green crystal groups of Mottramite on white calcite or dolomite.



Specimen of **Mimetite** (yellow) and **Mottramite** (green) from Tsumeb. The field of view of the entire specimen (top) is 40 mm. Above: Close up of same specimen from a different angle, with field of view 10 mm. Below: Close up of the **Mottramite** as sub parallel sea green translucent crystals. Field of view 2 mm.



The next Mottramite specimen is also from Tsumeb. Here, sharp crystals of Calcite decorate a lawn of Mottramite. Looking closely, the lawn of Mottramite is composed of tiny crystals. The Calcite is extraordinary because of the acute elongation of the crystals that I guess might have faces with Miller indices of 401 or even 801. To check this out further, go to the Mineralienatlas website, and look for the Calcite

page: www.mineralienatlas.de/lexikon/index.php/MineralData?mineral=Calcite. On that page, select Ulrich Baumgärtl's illustration of Kristal Nr. C024ab for a drawing of the 401 faces, and Kristal Nr. C024bb for the 801 faces. This specimen came for Cynthia Payne's collection. I bought it at the recent Shenandoah Valley Gem and Mineral Show in Fishersville, VA.



Crystal drawing of Calcite showing faces with Miller index 801, by U. Baumgärtl. The two most prominent faces as shown here are both 801.

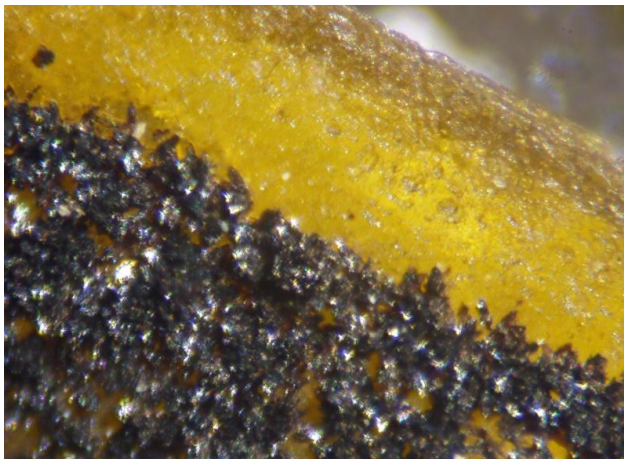


Calcite (colorless) on **Mottramite** (green) from Tsumeb, with field of view 5 mm. Right: Closeup of the Mottramite, giving an indication of individual crystals, field of view 1.5 mm.



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The last Mottramite specimen shows the mineral artistically sprinkled on Wulfenite, Pb(MoO₄). This specimen is from the Total Wreck Mine, Empire Mountains, Pima County, Arizona. I do not know how the mineral fairies managed such a tidy pattern.



Mottramite (dark brown) curiously placed on **Wulfenite** (yellow). Field of view 5 mm. Close up above has field of view 2 mm.

Photomicrographer, Michael Pabst



GeoWord of the Day and its definition:

terranoite A colorless or bluish orthorhombic zeolite mineral:
NaCa(Si,Al)₂₀O₄₀•~8H₂O.

All terms and definitions come from the [Glossary of Geology, 5th Edition Revised](#).

**GLMSDC Auction Invitation
October 25 1-5pm in Bethesda**

The Gem, Lapidary and Mineral Society of Washington, D.C. invites you to our 2015 Auction. This auction features unique specimens from our members' collections plus gemstones, lapidary rough, jewelry, beads, fossils, books and more. It will be held from 1-5 p.m. on Sunday, October 25, 2015 and will consist of a live and silent auction, run concurrently. The preview is from noon-1 p.m. Attendance is free.

The auction will be held at the Woman's Club of Bethesda located at 5500 Sonoma Road, Bethesda, MD 20817. Free parking is at the rear of the building and on the side streets. Directions go to: www.bethesdawomansclubmd.com

Cash and personal checks will be accepted. No third-party checks, please. Contact: Tony Wilner, auktion@glmsdc.org; Al DeMilo, info@glmsdc.org; Imelda Rocha, contact@glmsdc.org; and Mia Schulman, sec@glmsdc.org. Visit our website at www.glmsdc.org.

**Friends of Mineralogy – Pennsylvania Chapter
<http://www.rasloto.com/FM/>**

**SYMPOSIUM ON
RECENT ADVANCES IN MINERALOGY:
PENNSYLVANIA AND UNIVERSAL
APPLICATIONS
November 7-8, 2015**

Franklin and Marshall College, Lancaster, PA
Details in separate flyer.

Cynthia Czapek Barnes Payne

Cynthia is an amazing geology friend. Some of her many accomplishments are listed below.

*Charter member Micromineralogists of the National Capital Area since 1967

- *MNCA Vice President 1970-71; President 1970-72, 1975-77, 1986-88; Honorary member elected in 1979; Vice President 1981-86.
- *AMC Speaker Chair 1976-90.
- *EFMLS Citation Award 1983; EFMLS Educations & Program Chair 1960-62; Uniform Rules Committee 1965-?
- *EFMLS-AFMS Judge 1981-?
- *Wild Acres Functioning Committee 1980-89; Instructor 1980-86, 1991.

Mineral Society of the District of Columbia

- *Vice President 1967; President 1980

Recollections of Cynthia Barnes

By Cynthia in 1997

A class in jewelry-making taught by William T. Baxter at Bethesda Chevy Chase (BBC) High school was responsible for my joining the Mineralogical Society of the District of Columbia (MSDC). At the second class I found out that I didn't know the difference between jade and aventurine, and why they cut and polished differently. Jack Barbour, who was in the class, told me about the Gem and lapidary Society of the District of Columbia and the Mineralogical Society of the District of Columbia.

I joined both clubs in late 1965 and soon found out that I could learn a lot more about minerals at the MSDC. We had lectures every month, (Some of which I didn't understand at all), and field trips every month. I remember getting to a site and saying "OK, what am I looking for?" Experienced members were always helpful, showing me what to look for, and where. There were so many places to collect from then. We would visit some every year, certain favorite places where one could be sure of finding something interesting. Goose Creek Quarry at Belmont Station, (hurricane Hazel filled it with water); Centreville, Chantilly; Virginia Trap rock; Amelia; Baker Mountain, Virginia; Texas and

Marriotsville, Maryland; State Line Chrome Mine; (although I never did find any of that beautiful Williamsite); Gornog and Cornwall, Pennsylvania; Mineral, Virginia; Frostburg, Maryland, (and we almost froze up there one day in May); Pennsylvania Glass Sand Quarry; Harris Mica Mine, Virginia; Cedar Hill, Pennsylvania; Timberville, Virginia; Faylor, Pennsylvania; Hunting Hill Quarry, (the correct name according to John Griesbach, who was there when they started the first pit, Rockville to most people); Vesuvius, Virginia; Union Bridge, Virginia and more which I can't name at the moment. Have I made present members jealous? When the renovated Mineral Hall at the Smithsonian was completed, all our club members were invited to the opening evening celebration. I remember "ooohing and aahing" over the wonderful displays and those beautiful specimens.

In 1958 I went to my first Eastern Federation show in Ashville, North Carolina. Our club case, which Ted Schultz had taken there and set up, took 1st Place in Minerals. That show was followed by a week of field trips. I came home with the springs of my car sagging. I had some material for swapping and to put in our auctions. I made a lot of friends from all over the country.

The club and individual members always exhibited in the Gem and lapidary Club's annual show. Phil Cosminsky was usually there with his microscope and his little goodies. I stopped to say hello and by the time I got away, I was hooked on micromounting.

When I joined the Society, Sylvia Czayo, who had been secretary, was out of the country and that led to all sorts of confusion. I couldn't understand why anyone should confuse Sylvia Czayo and Cynthia Czapek. When she came back we became good friends and laughed about it, but that didn't stop the confusion until I got married in 1964 and changed my name to Barnes. She was secretary and I was treasurer at various times in between. Sylvia is still interested in minerals. I've seen her several times when I've been in Tucson, where she lives. She is now learning to facet.

I remember being treasurer in 1962 and 1964, and the discussions we had about raising dues, because I couldn't write a check until we had an auction, or I

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collected some dues. I am treasurer again and am happy to say we are in better financial condition that we were 30 years ago.

There are people who are gone that I think of every so often and still miss for themselves and for what he did for the Society. I think of Doug Alverson the most, perhaps because he did so much and died so young. Doug was secretary for many years, and I doubt that anyone else ever wrote minutes like Doug did. I believe some members came mostly to hear him read them, t times they were more interesting than the program. He always included a detailed account of the previous speaker, and if the lecture had been way over my head, I usually could understand the topic from Doug's way of talking about it. Finally, Doug said he was tired of the job, so we elected him president in 1967. He and I made a deal. By the time I was responsible for gathering the specimens and setting up the Society's displays for some time. I agreed to become vice president, the person who is usually responsible for programs, if Doug would take that duty. I would continue to set up club displays for shows. We both felt strongly that MSDC should always exhibit in Federation shows, being one of the 3 founding members of the Eastern Federation.

I remember Frank Berek who was registrar for many years. He kept name tags for everyone and would be at the door of old Room 43 early and hand each person his or her tag as he or she went in. He also greeted visitors and made them feel welcome by introducing them to some member to talk to. I remember Helene and Will Halliday. She was the perfect hospitality chairperson for years, and I spent many pleasant hours in Will's workshop making favors for the 1967 show. And Cedric Gleason, addressing Mineral Minutes and licking stamps at his dining room table. Ruth and Vernon Wertz; he was editor of the Mineral Minutes. They both wrote a column for rocks and Minerals, and many others. At the end of 1978, being told that I had held every other office, and that it was past time the Society had a woman president, I agreed to the nomination, and as everyone knows, that means you are elected. I learned just how much effort all my predecessors had put into the job.

It's hard to believe 36 years have gone by since I joined MSDC, and for a few years I could not be

very active, but have enjoyed learning about minerals, paying ridiculous prices at auctions, (sometimes too high, sometimes too low), meeting other people interested in the same things I am, and making some very wonderful friends. I really cannot expect 36 more years, but I intend to keep participating as long as I am able.



Cynthia presenting a mineral book to Richard Eftim, at the Smithsonian 1979



Cynthia designed the Crystal Model Tree which we still use at our annual geology club Christmas parties. 1983

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Cynthia is arranging micros in the club show case in 1984.



Mair Moody and Cynthia at the AMC in 1993.



Cynthia has a friend, Lou Perloff 1988 AMC.



Cynthia's late husband, Clarence Payne 1994



Sister, Lydia Czapek and Kathy Studinski admire MNCA's club case, 1990 EFMLS show.



Cynthia at our AMC 2014.

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American Federation of
Mineralogical Societies

AFMS)
www.amfed.org

American Federation Mineralogical Societies / SCFMS Convention & Show October 23-25, 2015 Austin, Texas

Sponsor: Austin Gem and Mineral Society, member
of the South Central Federation of Mineral Societies

Gem Capers 2015

THIS YEARS THEME IS PEGMATITES

[http://www.austingemandmineral.org/gemcapers/
2015ShowSchedule.pdf](http://www.austingemandmineral.org/gemcapers/2015ShowSchedule.pdf)

Convention Location

Doubletree Inn
6505 North Interstate Highway 35
Austin, TX 78752
(512) 454-3737

Show Location

Palmer Events Center
900 Barton Springs Road
Austin, TX 78704-1169
(512) 472-5111



Eastern Federation of
Mineralogical and
Lapidary Societies

(EFMLS)
www.amfed.org/efmls

Communication and Involvement
Are the Keys to Our Success!

Geology Events:

October:

**9-11: 59th Annual Paul Desautels
Micromount Symposium.** Friends School of
Baltimore, 5114 North Charles Street, Baltimore,
MD beginning at 7:30 pm Friday evening the 9th and
extending until noon on Sunday the 11th. Details
may be found on page 12 of *The Mineral Mite*

24 Cynthia Payne's 95th Birthday

24: ULTRAVIOLATION 2015

FLUORESCENT MINERALS ONLY

First United Methodist Church, 840 Trenton Road
Fairless Hills, PA: 9:00 AM to 4:00 PM
For information call 302-384-7876
email ultraviolation@yahoo.com

March:

11-12: Atlantic Micromounters' Conference
SpringHill Suites Alexandria, VA 6065 Richmond
Highway Alexandria VA 22303. Speaker TBD

Austin Gem And Mineral Society 54th Annual
This year's host of the 75th National Show of American Federation of Mineralogical Societies

GEM CAPERS



October 23, 24 & 25, 2015
Fri & Sat 9 am – 6 pm
Sun 10 am – 5pm

Palmer Events Ctr., 900 Barton Springs Rd.

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Cynthia is checking out our club website in 2015.

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Mark your Calendar for the 59th Annual Paul Desautels Micromount Symposium to be held on October 9-11

By Mike Seeds, Conference chair

The Desautels Micromount Symposium will take place at The Friends School of Baltimore, 5114 North Charles Street, Baltimore, MD beginning at 7:30 pm Friday evening the 9th and extending till noon on Sunday the 11th.



The program will include the Micromounters Hall of Fame induction Ceremony Saturday afternoon at 3pm followed by a talk, “**Micromounters I have Known**” given by honoree Lou D’Alonzo. Saturday evening at 7:30, honoree Dr. Donald Howard will speak on “**Filiform Minerals and Catalyzed Growth**.” Sunday morning at 10:30, Dr. Howard will speak on “**The Minerals of the Golden Horn Batholith, Okanogan Co. WA.**”

This rare multimount of four native elements by Hall of Fame member Jules Bernhardt has been donated by Lou D’Alonzo. It will be auctioned off in the voice auction on Saturday afternoon.



There will be giveaway tables, dealers, a silent auction and a voice auction. Lunch on Saturday will be provided. There will be plenty of mineral talk and mineral trading.

The program and registration materials are available on the Baltimore Mineral Society web site. Register promptly to reserve your spot at

<http://www.baltimoremineralsociety.org/2015desautelssymposium.html>

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
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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 2015 \$15 (single) or \$20 (family)

Payable to MNCA - Michael Pabst, Treasurer
270 Rachel Drive
Penn Laird, VA 22846



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

AFMS Editor's Award
First Place 2011 - Mini Bulletins

Member inputs:

*Cynthia Payne
*Michael Pabst
*Mike Seeds

