

to promote, support, protect and expand the collection of mineral specimens and to further the recognition of the scientific, economic and aesthetic value of minerals and collecting mineral specimens.

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BULLETIN OF FRIENDS OF MINERALOGY

Volume 48 No. I

ISSN 2471-7932

January 2018



President's Message By Mark Jacobson

The past quarter (October to December 2017) has seen several successful FM activities. The Pacific Northwest Chapter held their annual symposium on October 13-15; the Pennsylvania Chapter held their annual symposium (November 4th); and the New Mexico Mineral Symposium, with financial assistance of the National and Col-

orado Chapter was held (November 11th). There were other exciting mineral symposia not associated with FM, notably the Montana Bureau of Mines and Geology Mining and Mineral Symposium and the Yale Mineral Symposium. I am sure there are others, which I will learn about.

The FM national webpage was converted to wordpress and moved to a new host server in September 2017, thanks to the diligent efforts of Bill Besse. With the webpage in wordpress, progress has been made at populating the individual page tabs with more information and data. This includes but is not limited to expanding the historic FM newsletters backwards in time, documentation of past educational winners, best article of the year awards, and future and past mineral symposia in the USA. The speaker program for the Tucson Symposium (Feb 2018) and dates of the Midwest Chapter symposium (March 2018), PNW Chapter and Pennsylvania Chapter are already on the webpage.

My hope is that our symposia webpages will include abstracts from symposia where the abstracts are not available elsewhere, if the sponsoring organization is willing to let FM National post them. The populating process is slow – it will take several years. The goal is to have the website function as a resource about mineral symposia and what historic meetings have taken place and insure that the proceedings if they were created are not lost to future mineral collectors. Symposia proceedings usually don't manage to find a home in a library.

The other advantage of converting the FM webpage to wordpress is that other FM members, with skills no greater than being able to use WORD software, can add data and contributions to the FM webpages. If you would like to assist, email me and we will work this out. I do not want to be nor should I be the only person populating these pages.

The other tasks have been finding new directors and officers to elect, and meeting places in Tucson for the annual general meeting and FM business meeting. With the loss of retiring volunteers and searching for new volunteers, the National society is working to stabilize our current activities and do a better job communicating those activities. Synergies with Mindat are still to be discussed, especially regarding state locality indexes. Some (continued on page 3)

NATIONAL OFFICERS

PRESIDENT: Mark Jacobson; <u>markivanjacobson@gmail.com</u> VICE PRESIDENT: Virgil Lueth; New Mexico Tech, 801 Leroy Place , Socorro NM 87801-4796; <u>vwlueth@nmt.edu</u> SECRETARY: Randy Marsh, <u>marsh.rg@pg.com</u> TREASURER: Gloria Staebler, PO Box 234, Arvada, CO 80001; <u>gastaebler@aol.com</u> WEBMASTER: Jim Etzwiler, 19011 312th Ave NE, Duvall, WA 98019; <u>kd7bat@arrl.net</u> PUBLICITY CHAIRPERSON: Gail Spann, <u>bikingail@aol.com</u> EDITOR: Beth Heesacker, 4145 NW Heesacker Rd., Forest Grove, OR 97116, <u>heesacker@coho.net</u>

NATIONAL BOARD OF DIRECTORS

Terms expire in February, 2018 just before the general meeting : Clyde Spencer; <u>c_spencer123@att.net</u> Jim Etzwiler; <u>kd7bat@arrl.net</u> James Houran; <u>jim_houran@yahoo.com</u> Sue Liebetrau; <u>liebetrauam@msn.com</u>

Terms expire in February, 2019 just before the general meeting : Bob Meyer, <u>pyrite111@hotmail.com</u> Virgil Lueth; <u>vwlueth@nmt.edu</u> Mark Jacobson; <u>markivanjacobson@gmail.com</u> Linda Smith, <u>vanegas3@charter.net</u>

Terms expire in February, 2020 just before the general meeting : Allan Young, <u>allanyoung@msn.com</u> Gloria Staebler, <u>gastaebler@aol.com</u> Randy Marsh, <u>marsh.rg@pg.com</u> William Besse, <u>wwbesse@gmail.com</u>

CHAPTER REPRESENTATIVES (ALSO BOARD MEMBERS)

COLORADO CHAPTER: Jeff Self; <u>selfawareminerals@gmail.com</u> MIDWEST CHAPTER: Kenneth Bladh; <u>kbladh@wittenberg.edu</u> PACIFIC NORTHWEST CHAPTER: Bruce Kelley; <u>bruce.kelley@gmail.com</u> PENNSYLVANIA CHAPTER: Joe Marchesani; <u>Jmarch06@comcast.net</u> SOUTHERN CALIFORNIA CHAPTER: Dr. Don Buchanan; <u>dbuch7326@aol.com</u> MISSISSIPPI VALLEY CHAPTER: Larry Nuelle; <u>LNuelle@gmail.com</u> NEW JERSEY CHAPTER: David Shapiro; <u>Dshapiro33@gmail.com</u>

EX-OFFICIO BOARD MEMBERS

ROCKS & MINERALS: Marie Huizing; rocksandminerals@fuse.net THE MINERALOGICAL RECORD: Wendell Wilson; minrecord@comcast.net MINERALOGICAL SOCIETY OF AMERICA: Alex Speer; jaspeer@minsocam.org Mindat: Jolyon Ralph; jolyon@mindat.org MINERALOGICAL ASSOCIATION OF CANADA: Paula Piilonen; ppiilonen@mus-nature.ca MINERAL NEWS: Tony Nikischer; tony@excaliburmineral.com

> Deadline for the next FM Newsletter is April 25, 2018

interesting activities may result. If you want to be involved, call or email me. We are also in need volunteers to setup, staff and breakdown the FM National booth at the Tucson Gem and Mineral Show. Nelson Shaffer after many years of service retired from that task.

As president, my focus continues to be strengthening and documenting our current and past activities – symposia, some with FM sponsorship with or without financial contributions, documentation of mineral localities via publications and encouraging mineral and mineral locality exhibits at shows and museums. The FM chapters add mineral-geologic field trips to the mix. Adding new activities requires new volunteers, which I strongly encourage.

General Membership Meeting – Topics of Conversation

4:00~6:00 PM Tuesday, February 6, 2018 Hotel Tucson City Center, lunch tent in center quad 475 N. Granada, Tucson, AZ (Refreshments will be available) This meeting, as in years past, is sponsored by Martin Zinn III.

> Welcome and introductions of all present Call to order

New Business

Announcement of new/re-elected Directors

Chapter Reports

Colorado (Jeff Self) Midwest (*Randy Marsh or his representative*) Mississippi Valley (appointed representative) New Jersey (appointed representative) Pacific Northwest (*Bruce Kelley*) Pennsylvania (appointed representative) Southern California (*Don Buchanan*)

Discussion Topics

A TGMS symposium is no longer a requirement but does the membership still want a Tucson symposium?

Website volunteers and contributors, volunteers to provide foster parents to orphaned mineral collections

Provide upcoming symposia information for FM webpages. Do you want the website to provide past symposia agendas and proceedings [Mark Jacobson]

Continuation of the FM National table at the Tucson Gem and Mineral Show [desire suggestions of how obtain volunteers or is it time to abandon?]

Feedback from members

2018 Annual Friends of Mineralogy Business Meeting and Breakfast

7:30 to 10:00 AM, Saturday, February 10, 2018

Meeting location with hotel buffet breakfast

Country Inn & Suites by Carlson

705 North Freeway, just north of St. Marys Road and west of I-10, Tucson

AGENDA ITEMS

Welcome and Introductions of all in attendance

Verification of quorum (10)/Call to Order. Note: minutes from this meeting to be revised and approved by email prior to a date determined by the secretary.

proved by email prior to a date determined by the secretary.

New Business:

I) Welcome new and returning directors (Mark Jacobson)

2) Introduction of attending affiliate representatives.

Those present each get five minutes to speak on their concerns or items of interest, Rocks & Minerals, Mineralogical Record, Mineral News, Mindat, Mineralogical Society of America, Mineralogical Society of Canada, and American Geosciences Institute (AGI)

3) Communications from officers

President (Mark Jacobson)

Change in order and content of meeting to a decision oriented meeting. No Chapter reports will be given. Chapter reports are for the general membership meeting. Meeting minutes to be

approved by email prior to publishing in next FM National newsletter.

Vice-President (Virgil Lueth)

Announcement of winning displays at TGMS* (embargo on sharing)

Announcement of Best Article Awards

Items of concern that need input from the board or communications the board need to know.

Secretary (Randy Marsh's proxy representative since he can not attend due to work requirements).

Items of concern that need input from the board or communications the board need to know. Treasurer (Gloria Staebler)

Financial report/Draft Budget

Items of concern that need input from the board or communications the board need to know.

4) Committee and non-elected position reports

A) Webmaster (Jim Etzwiler- unable to attend but Mark Jacobson as his representative will discuss) Communication of changes made and future intent for webpages

Request for volunteers to add content to new webpages

- B) Newsletter (Beth Heesacker)
 Items of concern that need input from the board or communications the board need to know.
 C) Publicity (Gail Spann or her repesentative)
- Items of concern that need input from the board or communications the board need to know. D) Symposium Funding -Selection Committee (Allan Young)
 - Recommendations for symposia support for 2018-19, voting by board to approve.
- E) Directors-at-large nominating committee Confirmation of representatives

5) Action items

- A) Electing new officers
- B) Appointing or reconfirming Directors-at-large nominating committee for 2018-2019: Committee determines due date for communicating via email nominated new officers to be voted on by membership.
- C) Appointing or reconfirming Symposium Funding Selection Committee for 2018/2019
- D) Discuss meeting locations for next year's business meeting and general membership meeting. Agreeing to person in charge or/and location
- E) Appointing or reconfirming the official Webmaster

F) Tucson symposium for 2019 discussion and decision: if no volunteers can be found, abandon

G) Tucson show FM booth for 2018 and 2019: If no volunteers, abandon

H) Revision of symposium funding process and criteria –Desired action: Proposal for a vote on revision and a second. Voting to be by email at a later time, agreed to at his meeting. Discussion prior to voting to be after this meeting.

6) Old Business:

I) Minutes from last business meeting of February 2017 were already approved by email and published.

2) Status of review of historical records - if no new volunteers, no action planned

FM Director Nominations

Four positions are open on the board for At-Large FM Directors The following five candidates have agreed to fill these positions. They are:

Bruce W. Bridenbecker

Upon graduating with a B.S. in Geology from Northern Arizona University in 1979 I worked as a Senior Geophysicist for Cities Service Company at offices in Tulsa, Denver, and Bakersfield from 1980-1988. After leaving Cities Service Company, I went into education and taught Earth and Physical Science at the secondary level until 2000. During that time, I earned a M.S. in Geoscience from Mississippi State University and a M.A. from California State University San Bernardino in Environmental Education. I have held the full-time position as Professor of Earth and Physical Science, Copper Mountain College, Joshua Tree, CA since 2000.

I have been a member of Southern California Chapter Friends of Mineralogy since 2003, a SCFM board member since 2006, and its treasurer since 2010. During this time I have attended several annual board of director meetings and would like to be considered for a position on the National FM Board of Directors.

Chris Whitney-Smith

Dedicated to all who are inspired by the beauties and mysteries of the mineral kingdom. (Arthur L. Flagg) I am a fourth generation Arizona native, born in Morenci at foot of the Coronado Trail. I credit my remarkable Mother for nurturing my curiosities in the beauties of art and earth sciences at an early age. I often reflect that if Arizona is the Holy Land for minerals and mineral lovers, for me, Greenlee County was the Holy Grail. A serendipitous visit to a Glenwood, New Mexico Rock Shop, summer of 1985 sparked what would become my lifelong passion for gemstones and minerals; it was there, a lustrous Red Cloud Wulfenite became the lens that forever changed how I viewed the rock and mineral universe. I departed college early in 1991 to serve in United States Navy at Pearl Harbor, Hawaii. I relocated to Phoenix in 1997 and joined Mineralogical Society of Arizona in 2007. I'm West Area Senior Project Coordinator, Project Services at Staples Business Advantage.

My collection is comprised of micro to décor size mineral specimens that includes radioactive and fluorescent minerals. My current obsessions include work with select non-profits in earth sciences, educational, and competitive mineral exhibitions, competitive thumbnail minerals, mining and field collecting, Arizona & African minerals and finding new ways to help others explore world's most people never knew existed.

I am a member of Mineralogical Society of Arizona (MSA) as President, Editor of The Rockhound Record, and Curator of MSA Mineral Collection, a Board Member and Founding Trustee of Earth Science Museum, Board Member and Trustee of Flagg Mineral Foundation, Sponsoring Member of Mindat.org, Member of Tucson Gem & Mineral Society, Treasurer of Arizona Mineral Minions, Advisory Board Member LGF Foundation for LGF Natural History Museum, President of 1879 Minerals LLC and Owner of 79 Mine.

Jolyon Ralph

Jolyon Ralph is a mineral collector, computer programmer, and the founder of <u>mindat.org</u>. He started mindat as a personal mineral information database in 1993, and eventually launched it as a web site in October 2000. His work includes managing the existing database as well as refining and expanding its features and uses. He has contributed to research projects such as the Mineral Evolution Project and is consistently working to develop the potential scientific applications of the data held by <u>mindat.org</u>. Today, Mindat is part of the Hudson Institute of Mineralogy, a 501(c)(3) not-for-profit organization. Jolyon also runs the <u>gemdat.org</u> website with his wife Katya. They have a young son, Roman, born in 2014. Both of them live in London, England.

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Erin Delventhal

Erin Delventhal is by profession a photographer and graphic designer with a degree in mechanical drafting, but developed a passion for minerals from a young age, where her childhood in Farmington, New Mexico was spent on field collecting trips with her family and a local mineral club. After an adolescence spent on other hobbies, her interest in the mineral world was rekindled after a trip to the Tucson Gem & Mineral Show in 2014. After returning home, she rejoined her local mineral club and has since served two years as a general board member, is serving in her second year as both secretary and newsletter editor, and has been honored by the club with "Rockhound of the Year" twice. She served as lead volunteer during the opening of the Sherman Dugan Museum of Geology, where she was able to further her knowledge of and experience with mineral specimens through identifying, cataloguing, and labeling the contents of a new mineral museum. She now works, in Farmington, NM, as the Manager of Things for mindat.org.

Alexander G. Schauss

A visit to the American Museum of Natural History in 1955 started my life long love of mineralogy. Dr. Frederick Pough (1900-1999), then-curator of the museum offered me the opportunity to volunteer at the museum, thus providing me the opportunity to handle thousands of specimens over a span of eight years. A clinical trial I organized in 1969 led to a call from Nobel Laureate, Linus Pauling, himself an avid collector of minerals, who mentored me toward a career in public health and nutrition. Since then I have held positions at four institutions up to the rank of clinical professor to become a noted food scientist and author of over 200 scientific publications including 37 chapters and 23 books in the fields of nutrition and botanical medicine, including Minerals, Trace Elements and Human Health, and Zinc and Eating Disorders.

I recently co-authored articles in Mineral Monographs and Rock & Gem. Having visited the Tucson Gem and Mineral Show annually since 1967, I moved in 2011 to Tucson, Arizona, after which I joined the Department of Geosciences at the University of Arizona as a Research Associate.

I am also a member of the University of Arizona's Gem and Mineral Museum Advisory Board, chairing its fund-raising committee, a Trustee of the Arizona-Sonora Desert Museum, a former President of Friends of Mineralogy, a member of the Mineralogical Society of America, the Mineralogical Society of Arizona, the Pinal Gem and Mineral Society, the Tucson Gem and Mineral Society, and a Life Member of the Flagg Mineral Foundation. I believe strongly in the role mentors, clubs, and museums play in encouraging young adults and children to take up an interest in the Earth Sciences.

Friends of Mineralogy Support of Activities Timeline and Procedure for Funding Activities

Definitions:

Executive committee – President, Vice-president, Secretary, and Treasurer. Selection committee – three appointed members with a committee chosen chairman

February 15-December 31 Receiving requests:

<u>Start of Funding Year</u>. FM President via the FM website notifies not-for-profit mineralogical organizations of availability of funds to help sponsor symposiums and other related activities or projects and instructs those interested to apply for funds by letter (or email) to the FM President and the chairman of the selection committee as noted on the FM website prior to December 31. The application shall be for funding during the 12-month period beginning February 15 of the **following** year.

Included in the application shall be the name of the organization, a description and history of the upcoming event or activity, the date(s) and duration, expected attendance, the amount and proposed use of the funds, any special circumstances justifying the request, and proof of the organization's not-forprofit [501(c)(3)] status. Deadlines for applications shall be December 31.

December 31 to February 15 listing, ranking and recommending request

<u>Selection Committee reviews.</u> The Selection Committee accepts all applications and reviews them by the selection criteria set forth by the Executive Committee. Rejected/non-recommended applications are still evaluated and passed on to board members.

<u>Ranking of requests.</u> The Selection Committee ranks in sequential order by their preferences, the funding requests for all Board members to inspect. The Selection Committee chair person sends this ranking with their recommendations (both qualified and un-qualified) to all Board members by email. The evaluation will list <u>all</u> applicants, qualified and unqualified, and each Board member will be asked to rank the applications in order of their preference, with a "1" being the most preferred. Rejected requests by Board members with be signified by "R" Once complete, each Board member will return their ranking preferences by email to the all Selection Committee members. Non-voting Board members are treated as abstaining.

<u>Determination of level of support.</u> After the Executive Committee reviews the results of the Boards preference voting, they will recommend the total maximum amount of funding for disbursement as a lump sum for all requests and recommend each request's individual amount. These recommendations will be emailed/mailed/phoned/text message to all Board members prior to the February business meeting. The Selection committee can recommend different amounts than what the Executive committee recommends.

February 15, End of Funds that were approved at the previous meeting.

Mid-February Business meeting:

At the annual Board meeting in Tucson, the Selection Committee Chair will present the Selection Committee's results and recommendations to the Board. It will then be up to the Board to vote to approve the recommendations as is, or modify them with amendment(s). The successful (and unsuccessful) applicants will be notified as soon as possible following the Board meeting. Funding will be provided to the successful applicants as is feasible soon thereafter.

Friends of Mineralogy Support of Activities Guidelines for Selection of Recipients

Applicants must have 501(c)(3) not-for-profit status.

Applicants should apply for funding by submitting a written request by letter (or email) to the FM Executive committee and chairman of the Selection committee by December 31. The application shall be for funding during the 12-month period beginning February 15 of the **following** year. Included in the application shall be the name of the organization, a description and history of the upcoming event or activity, the date(s) and duration, expected attendance, the proposed use of the funds, any special circumstances justifying the request, and proof of the organization's not-for-profit [501(c)(3)] status.

Except under special circumstances, funding will not be provided to FM chapters.

- The maximum amount funded for conferences and symposia will be \$200 per day, up to a maximum of \$600 for three days or more.
- All applicants satisfying the above criteria shall be listed on the ranking evaluation request provided to each Board member.

Applicants are recommended but are not required to provide to FM National for posting on their website as advertising a pdf document with information about their symposium, symposium agenda when known and symposium abstracts, and speakers biographies if available and allowed.

2017 Friends of Mineralogy – Best Article Awards

Mineralogical Record: Günter Grundmann, Thomas P. Moore, and Wendell E. Wilson *St. Andreasberg, Western Harz Mountains, Riedersachsen, Germany* Volume 48, May-June, 2017, p. 301-410.

Rocks & Minerals: Eric Heinen De Carlo and Bryan Swoboda *Mineral Localities in Hawaii* May/Jun 2017, Vol. 92, No. 3, p. 218-235.

Mineral News: Mark Ivan Jacobson *The Early History of the Himalaya Pegmatite Mine (V Parts)* V. 33 Nos. 1-5.

Mineral Monographs Dr. Bram Janse *Geology of Diamond* No. 19: Diamond – The Ultimate Gemstone, p. 11-23.

E DE LITES of the World

Rudy Tschernich , RIP 1945-2017



Tschernichite, Neer Road, Goble, Columbia Co., Oregon, USA, Fov: 3.5 mm , Photo by Rudy Tschernich

It is with profound sadness that I report the passing of Rudy Tschernich today, December 26, 2017. Rudy was born in Snohomish, Washington in 1945 and developed a love for mineral collecting with an exceptional passion for the zeolite group minerals that were so prevalent in his home in the Pacific Northwestern United States. His collection of nearly 12,000 zeolites from worldwide localities, most of them personally collected, was eventually donated to the Rice Northwest Museum of Rocks and Minerals in Hillsboro, Oregon. Rudy served on the board of the Rice Museum before being invited by Museum co-founder, Sharleen Harvey, to join the museum as full-time curator following his retirement from the U.S. Postal Service in 2003. Rudy served as curator of the Rice Museum until 2011.

Rudy was a dedicated field collector and was involved in many new discoveries, most famously those of the Neer City Road site in Goble, Oregon where three zeolites new to science were discovered in a small dig site. These minerals included boggsite, cowlesite, and a mineral that was initially confused with apophyllite. That latter mineral turned out to be a new mineral that was named in Rudy's honor: tschernichite (Boggs, et al., 1993). Rudy was involved in recording the mineralogy of many zeolite locations, but arguably his greatest contribution to science was his 1992 book, Zeolites of the World, in which Rudy meticulously documented thousands of zeolite localities. Rudy was instrumental in the founding of the Pacific Northwest Chapter of the Friends of Mineralogy, which honored him in 2000 with the Noble Witt Award for his self-less contributions. He was also recognized by the Rice Northwest Museum of Rocks and Minerals which named its Northwest Gallery in his honor.

Rudy was active to the very end. His last project was re-photographing his entire zeolite collection using modern photomicrography techniques. His legacy lives on through his collections, his writings, his photographs, the museum gallery that bears his name, and the lives he touched. He was also modest and wished no services be held in his memory. Nevertheless, we are grateful for his contributions. Boggs, R.C., Howard, D.G., Smith, J.V., Klein, G.L. (1993) Tschernichite, a new zeolite from Goble, Columbia County, Oregon. American Mineralogist: 78: 822-826.

Respectfully, Julian Gray, Executive Director Rice Northwest Museum of Rocks and Minerals Hillsboro, Oregon http://www.ricenorthwestmuseum.org

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James L. Quickel 1927 - 2017

Pennsylvania Collector and Chapter Member

Long-time, active collector and FM-Pennsylvania Chapter member James Quickel has died. More may be found in the obituary at cumberlink.com, which reports "World War Two veteran Sgt. James Lavere Quickel (USMC) was relieved of



duty on September 8th, 2017. He was born on September 4th, 1927 to James Monroe Quickel and Edna Marie (Cleaver) Forsythe in East Berlin, PA. James was married to Nadine R. (Sieg) Quickel until she passed away May 25th, 1988." He is survived by three sons and their wives, grandchildren and great-grandchildren. The obituary notes that he wore the title of United States Marine with great pride. It recounts his many activities as an outdoorsman, most notably as a mineral collector, but also champion rattlesnake competitor, winning homing pigeon competitor, motorcycle racer, and hunter. He was a scoutmaster for many years.

As the obituary says, "James had a passion for mineralogy." He was an active collector for many years. One aspect of his collecting was gold panning. In the Summer 2002 issue of the FM-Pa Chapter Newsletter, the late Martin Anné wrote, "Jim Quickel and I started on a quest for gold in Lancaster County in 1981... Our best find was at Peters Creek (5/22/82), when Jim Quickel found an area where, probably, the most placer gold has been found in Pennsylvania." A 1984 trip in York County "...I believe, was Jim's last trip, due to health concerns. It should be mentioned that Jim was the one, on his own, who found gold in northern York County."



Pyrrhotite from the Grace mine, Berks Co., PA. Quickel collection 538 at Bryn Mawr College. R. Sloto photograph.

His extensive collection of Pennsylvania minerals now resides at Bryn Mawr College, Bryn Mawr, Pennsylvania. The Spring-Summer 2007 issue of the FM-Pa Chapter Newsletter reports that "... cataloging of the 1000-specimen James Quickel Pennsylvania collection" was almost complete; "the Quickel collection is rich in central Pennsylvania material, in addition to the classic southeastern localities." Specimens from the collection were to be on exhibit in Fall 2007; a few are shown here.



Fluorite from the Eastern Industries quarry, Berks Co., PA. Quickel collection 452 at Bryn Mawr College. R. Sloto photograph.



Feldspar from the Elk Creek prospect, Chester Co., PA. Quickel collection 552 at Bryn Mawr College. R. Sloto photograph.



Stilbite-stellerite and calcite from the Kibblehouse quarry, Montgomery Co., PA. Quickel collection 904 at Bryn Mawr College. R. Sloto photograph.

For our society, another orphaned article written in 1981 by John Sinkankas. It is an article that should have had wider readership in 1981 but it seems to have never been done. Better now than lost forever. No changes have been made to the John's hand typed article. MIJ

PAPER SUBMITTED TO THE MSA - FM SYMPOSIUM ON MINERALOGY OF PEGMATITES, Tucson, Arizona, February 15 - 16, 1981.

ALPINE-TYPE BERYL-EMERALD DEPOSITS NEAR HIDDENITE, NORTH CAROLINA

by John Sinkankas San Diego, California

ABSTRACT

Occurrences of beryl and its chromium-bearing variety emerald in the vicinity of Hiddenite, Alexander County, North Carolina have been known since 1875. Several previous attempts to exploit the deposits for mineral specimens and gemstones have met with only limited success. Most descriptions of the deposits class them as pegmatites enclosed in the local biotite-gneiss but field examinations in 1969 showed that they are hydrothermal veins deposited along a series of cross-cutting fractures in the gneiss. In non-saprolitized portions, wall alteration extends to several centimeters with the production of replacement muscovite and albite with some rutile. Within the veins, many of which are only partly filled, quartz (milky, smoky, late amethystine), muscovite, albite, goethite (pseudomorphous after Fe-bearing carbonate), beryl (aquamarine, late emerald), and rutile are common species. The morphology of the veins as well as the mineralization bear strong resemblances to the Alpine klufts classed as "Fundortgruppe 10f" by H.A. Stalder, and others, <u>in Die Mineralfunde der Schweiz</u> (1973). Despite the presence of small pegmatite bodies intercalated in the gneiss, beryl mineralization appears to be confined to the veins mentioned. For these reasons the veins are classed as Alpine in type and possibly represent a unique mode of emerald occurrence. Although no spodumene-bearing body was examined during the suthor's visit in 1969, it is likely that the chromium-bearing spodumene (hiddenite) is also unique in its mode of occurrence.

HISTORICAL BACKGROUND

The earliest recognition of emerald near Hiddenite, Alexander County, North Carolina occurred in 1875 when J.A.D. Stephenson¹ of Stony Point (later changed to Hiddenite) obtained several crystals from a property that was later exploited as the Emerald and Hiddenite Mine. Other crystals were obtained locally in 1876 and 1879, and the Cr-bearing variety of spodumene (hiddenite) in 1879. These finds were made known to W.E. Hidden who visited Stephenson and was shown the productive ground in 1879. Shortly afterward, Hidden obtained leases on the ground, later purchasing same, and commenced mining in 1881, but was forced to suspend mining in 1885 due to litigation.

In 1907, the American Gem Mining Syndicate reopened the original Hidden mine and also opened a deposit known as the Ellis Mine, lying just east of the town. Apparently only one season of work was accomplished and no further work was done until the brothers B.S. Colburn and W.B. Colburn of Statesville, North Carolina mined the Emerald and Hiddenite Mine during 1926 and 1927².

The large paper on the geology and mineralogy of this deposit by Palache, et al³ was based on specimens recovered by the Colburns and S.C. Davidson in 1926. The Hiddenite field remained quiescent until 1969 when C.G. Rist of Pennsylvania purchased several tracts of land and the adjacent Ellis Mine property, organising American Gems, Inc. with the intention of mining emeralds and other minerals. From the beginning of this venture, which still continues under the name of Emerald Valley, collectors were allowed upon the land after paying a fee. In October, 1969, the author visited the property and rendered a report to Mr. C.G. Rist on the nature of the deposits and the prospects for future profitable operation.⁴

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GEOLOGY AND MINERALOGY

Sterrett⁵ visited the Hiddenite area in 1908 and found that the rock enclosing the emerald-hiddenite deposits was a much compressed and distorted biotite gneiss, replaced along the vein walls by quartz, muscovite, rutile, pyrite, and other minerals, with the veins containing quartz, calcite, dolomite, muscovite, rutile, black tourmaline, beryl, hiddenite, pyrite, chalcopyrite, and monazite. In 1927, Davidson⁶ reported a visit to the emerald-hiddenite deposit while it was being worked by the Colburns, and described the enclosing rock as a fine-grained, quartz-biotite-garnet gneiss, "probably representing a completely recrystallized argillaceous quartzite of Pre-cambrian age." Further remarks on the rock and its composition appear in Palache, et al.,³ and also descriptions of three stages of pegmatitic mineralization, namely, lit-par-lit pegmatite, thought to have been injected prior to complete folding of the gneiss, hiddenite-bearing pegmatite, concordant to gneiss foliation, and hiddenite cavities or vugs that occur along fissures cross-cutting the gneiss, and which "remind one very strongly of the Alpine clefts in form, structure and the habit and nature of the contained minerals" (p.286).

Neither beryl nor hiddenite were found in the lit-par-lit bodies while hiddenite, of an "olive green" color, was found in the hiddenite pegmatites, and beryl (aquamarine and emerald) was found in the cavities, along with a number of species found only in these cavities. The cavity species are quartz, amethyst, albite, adularia, hiddenite, holmquistite, beryl, tourmaline, garnet, muscovite, nontronite, rutile, apatite, monazite, pyrite, arsenopyrite, calcite, ankerite, siderite, and aragonite.

The hiddenite/beryl-bearing cavities observed by Palache, et al.³ were remarkable for their sharp contacts against the enclosing gneiss in some places, but in others, some "were less sharply delineated and are surrounded by zones of bleached and altered gneiss," and that "cavities may well be the result of destructive attack on parts of earlier-formed pegmatites." Sterrett⁵ remarked that the enclosing rock was highly silicified, attributing numerous quartz veinlets in the gneiss to ingress of this mineral from the mineralized veins. He noted alteration of the gneiss and the fact that the zone next to the vein consisted largely of quartz with emerald green ("chrome") muscovite, with a little rutile and pyrite, the alteration gradually lessening to about 2 inches [5 cm) from the vein wall. Pegmatite is mentioned only once by Sterrett (p.801), who noted that "the vein at the Ellis emerald mine is pegmatite, with cavities and pockets included in it."

During my visit in 1969, I found that the Ellis mine had been cleared of debris and the country rock well exposed. Several common granitic pegmatite blocks were present but contained no cavities nor traces of species other than the usual feldspar-quartz-mica assemblage. However, a vein, similar to the kind seen by Sterrett and Palache, et al. was clearly exposed in fresh gneiss, enabling close examination over a distance of about 15 meters. In one place, an elliptical opening of about one meter in length and one-half meter in width showed a lining of milky quartz sharply in contact with the gneiss. Some distance away, the vein changed in character, displaying uneven alteration of the wall rock to depths of from several cm to 10 cm. In one place, alteration had proceeded so far that the vein opening was lined with slab-like porous masses of interlocked green muscovite crystals of hexagonal outline, upon which were perched numerous white blocky albite crystals, some quartz crystals, a little chlorite and pyrite, and reticulated twins of rutile. In still another place along the same vein, wall alteration was very minor and here was found a mass of white an-kerite (?) crystals, quartz crystals of white to colorless beryl, no thicker than several mm.

Elsewhere on the American Gems property, numerous pits were examined that had been sunk through the reddish topsoil and the saprolitized gneiss to depths of from two to four meters. Most of these followed outcrops of quartz float, sometimes resulting in discovery of a vein, but at other times finding nothing because of lateral displacements from the original vein outcrops. Some of the pits clearly exposed the gneiss structure and lit-par-lit stringers intercalated in the gneiss. Because of severity of alteration and general slumping of the decayed gneiss, it was not possible to detect the degree of alteration that had occurred along vein walls. However, it was determined that all such veins cross-cut the gneiss foliation in nearly vertical dips. The sequence of minerals filling these veins showed milky quartz at the top, clear quartz and euhedrons below, small to large rhombs (up to 10 cm on edge) of altered Febearing carbonate (ankerite?), small druses of amethyst crystals, rutile, emerald, crystals of muscovite and albite, black tourmaline crystals, and rarely monazite crystals. This sequence was confirmed by Mr. W.D. Baltzley, mine property manager, who had accomplished much exploratory trenching using a

mechanical back-hoe. IP none of the pits were seen any granitic pegmatite bodies exceeding about 5 cm in thickness, and those that were found appeared to be of the lit-par-lit type mentioned previously. Whether any of these bodies contain the suite of minerals, including hiddenite, mentioned by Palache, et al is not known. Despite much care in examining vug contents, Baltzley confirmed that no hiddenite had been found on the American Gems tract up to the time of my visit.

Only one body of ordinary beryl-bearing granitic pegmatite was found on the American Gems tract, this being a lens-like body almost a meter in thickness and perhaps 10 meters long which appeared to be concordant with the enclosing gneiss foliation. The beryl in this body was the common variety, yellowish in hue, and much fractured. No connections of this body to vug mineralization could be observed. The presence of similar pegmatite in the Ellis Mine was remarked upon by Sterrett, with the implication that aquamarine and emerald were obtained from vugs and pockets within it but no evidence for this was seen during my visit. Furthermore, no beryl was found in the lit-par-lit bodies previously mentioned, and the source of the beryllium in the vein cavities remains unknown.

COMPARISON WITH ALPINE VUGS

All above findings reinforce the statement originally made by Palache, et al. that the cavities in these veins are strongly reminiscent of Alpine clefts. The closeness of this resemblance is verified by comparing the mineralization given for Alpine cleft "Fundortgruppe 10f" described in Stalder, et al. <u>Die Mineralfunde der Schweiz</u>⁷ (p.253-6), where the chief recognition features of cavities in this paragenetic group is the suite: ankerite-siderite, with calcite, muscovite, quartz, albite, chlorite, rutile, pyrite, and sphalerite, the last species, however, not reported from Hiddenite. Also noted specifically is the occurrence of Fe-bearing carbonates which alter completely into goethite. In a specific locality at Faido, the clefts contain clear quartz crystals, strongly limonitized siderite penetrated by sagenitic rutile and six-sided muscovite crystals. In another place at Faido, occur weathered carbonate, amethyst, rutile, monazite, and, in limonite masses, long hair-like needles of a mineral identified as beryl.

Therefore, in terms of enclosing rock, type of vein opening, and mineral associations, the strong resemblance noted by Palache, et al seems more than accidental, and confirm that the veins near Hiddenite are most closely related to Alpine clefts than to any granitic pegmatite mineralization.

ORIGIN OF BERYL-EMERALD DEPOSITS

Field evidence suggests that a system of tension or flexure fractures appeared in the gneiss and provided channels for ingress of hydrothermal solutions which partly altered the walls of the fractures, perhaps obtaining therefrom constituents that contributed to the formation of vein silicate species as quartz, albite, muscovite, chlorite, and others. The lithium necessary for spodumene formation may have been leached from the hiddenite-pegmatites of Palache, et al., or like the beryllium needed for beryl, obtained from distant and as yet unidentified sources as granitic pegmatites or granitic magmatic rocks. The absence of spodumene in the large tract of American Gems suggests that lithium is not as widespread in the vein system as beryllium. The source of chromium necessary to impart the typical blue-green hue to hiddenite and emerald is also unknown, none of the rock so far described from the Hiddenite area containing any identified Cr-bearing species. However, if the fracture systems extend to considerable distances laterally and in depth, some bodies of basic, Cr-containing rocks may have been cut through to provide this coloring ion.

As in the hydrothermal veins of the Muzo type in Colombia, which, however, differ in important respects from those at Hiddenite, introduction of Cr in the mineralization sequence is neither uniform nor consistent. In some places at Hiddenite, veins contain aquamarine or colorless beryl, and no great distance away, similar veins contain emerald. An important distinction is that almost all emerald at Hiddenite is deposited upon pre-existing beryl crystals as a late stage mineral, seemingly in variable amounts because large crystals always are coated with thin layers of emerald and hence appear quite pale, while small crystals, more heavily coated, appear considerably darker in many specimens, and in a few instances, have provided sufficient thickness of emerald to afford cut gems.

NOTES ON PARAGENESIS

In the Ellis Mine vug system, quartz appears to be the first species to line cavities in one place, but muscovite/albite, with guartz and rutile, line the walls elsewhere. Colorless beryl formed very slender colorless prisms perched atop the muscovite/albite linings. In the veins elsewhere on the American Gems tract, the relationships are less clear because of the saprolitization of the gneiss and movements of both the decayed gneiss and vein contents, the latter often appearing as disjointed strings of vein remnants blending imperceptibly into the saprolite. However, quartz appears in three stages, the first as milky quartz forming linings and "hoods" over cavities, followed by clear quartz crystals, some rutilated, and lastly small druses of amethyst whose basal impressions show that they were originally overgrown on carbonate rhombs, also over quartz crystals of the second quartz generation, and over beryl crystals. Rutile is a very early species, forming handsome, brilliant twin reticulations perched on muscovite-albite wall linings, and also enclosed in quartz and by carbonate rhombs. Beryl and emerald appear to be earlier than the carbonate rhombs, some specimens showing penetration of rhombs by emerald crystals. The position of tourmaline, monazite, and other species is not known because these occur loose in vug debris. Calcite is mentioned as a very late, perhaps the last species by Sterrett but was not found during my examinations of the Ellis deposit and those elsewhere on the American Gems tract. In some vein cavities, very late hydrothermal activity resulted in the etching of emerald crystals, pitting the faces of first order prisms, severely pitting those of the second order prism, and dissolving faces of the pinacoid, leaving behind a curious "worm-track" pattern that closely resembles similar markings on tektites and appears to be distinctive for Hiddenite emerald crystals.

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Midwest Chapter Update

President's Message

s fall greets us with beautiful leaf colors and cooler temperatures, I hope that your summer allowed you to attend one of the regional/national mineral shows or even participate in one or more of the FoM Midwest sponsored fieldtrips. **Our annual meeting is approaching on November 18 (Saturday) at Wittenberg.** I am happy to provide some "show and tell" display space for your new self-collected, purchased or traded specimens acquired this past year. We all learn by seeing specimens that are new to us, so don't be shy. Bring a couple of specimens that you think other members may like to see. Perhaps there are unknowns on a piece that you would like some assistance with identifying. Bring the specimen with you; there will be plenty of expertise at the meeting to help. We also will have swap tables and silent auctions. Donations are welcome and proceeds go to the club treasury.

I just got back from the 73rd Detroit Gem, Mineral & Fossil Show and am embarrassed to admit that I have not attended the show for decades. My last time was when it was still held at the Detroit Light Guard Armory on 8 Mile Road. I just couldn't fit the commitment into my schedule while working full time. The new venue, Macomb Community College South Campus Expo Center (Warren, MI), is easy to find, spacious, and has free parking (and a good restaurant across the street). This year approximately 60 dealers participated. Like most shows in my recent experience, the mix of displays and dealers had quite a few lapidary and knickknack vendors at the expense of mineral specialty dealers. Fossils occupied as much display area as minerals and a significant fraction of dealer space. None the less, several dealers offered good quality mineral specimens (old/classic and newly available) from our region and the world. Enough good minerals of all categories were available (micromount to cabinet) to consume almost anyone's budget. I was disappointed by the absence of exhibits from regional museums and universities other than Cranbrook Institute and A.E. Seaman Museum. I valued the leisurely opportunities to chat and compare notes about minerals with several FoM members. The main downside for me was a lack of illustrated mineral talks on the day I could attend (Saturday). The sponsors (Michigan Mineralogical Society, Cranbrook Institute of Science) are to be commended for a good show.

I had seen spectacular mineral displays at past mineral shows in Ohio, most notably Cincinnati Geofair. So, I decided to visit the Cranbrook Institute (near Detroit) for my first time. Wow! What a spectacular, 320 acre, rolling, wooded hills campus. It's an oasis near a major metropolitan area. However, driving in and around Detroit during Friday rush hour was an experience I hope not to be forced into again anytime soon! Cranbrook has a good website with educational resources and photographs of many of the geology and paleontology exhibits

(<u>https://science.cranbrook.edu/explore/exhibits</u>). Cranbrook's science museum is open late Friday night and the crowd was mainly young kids and their parents attending birthday parties away from the main exhibits. The Mineral Study Gallery presents well-lighted exhibits of approximately 1800 minerals grouped in the traditional Dana chemical classes: oxides, sulfides, silicates, etc.

Hands on interactive exhibits are located in other geology galleries adjacent to the Mineralogy Gallery. All are worthy of your time and attention.

My pleasant experience at Cranbrook Institute encourages me to seek your help identifying other exhibits worthy of a visit. So I am asking our membership to nominate other public mineral exhibits in our region worthy of visitation (respond to the president email link on the FoM Midwest webpage or see me at the November meeting). I hope that once vetted, these suggestions and rationale (regional, systematic, educational) for each will be added to the list on our website to help publicize these important resources for education and public outreach.

http://www.fommidwest.org/library/mineralogy-links/

An initial suggestion for the list of regional displays of high quality (not currently on the FMMW website) that I have visited personally is the Hillman Hall of Minerals & Gems, Carnegie Museum of Natural History (Pittsburgh).



New Jersey Chapter Update

By Dave "Groundhog" Shapiro, President

Its definitely been an eventful 2017 for us in Friends - NJ. I took over from KC Dalby as President in April and we have re-structured the operating style of

our Monthly meetings after experiencing a sharp drop-off in membership at end of 2016 - start of 2017. I believe we have thrived since and managed to only encounter a marginal drop-off at the end of our Fiscal Year.



We have implemented more engaging programs and topics for discussion at the Meetings and try to incorporate as much current field-collecting related info as possible. We had 2 stellar dinner + guest speaker events in July and December which produced record turnouts for us. Also other ventures like us ordering and receiving our first Club T-Shirts mid-year, was a success and helped garner club interest. We have also partnered up with other Clubs in our area for joint field trips and have expanded our horizons for potential continued trips, in effort to remain extremely competitive in this area.

We hope in 2018 to re-establish our yearly Summer event "Fellowship of the Rock" which KC Dalby came up with and hosted at his residence in Monmouth County NJ. We coordinated the event in 2015 and 2016 and both outings were a pleasant time for Club members to touch base and partake in some Vendor Sales at KC's residence.





President's Message

Greetings, mineral lovers!

I have heard from a number of you that this year's symposium, "Minerals of the Pacific Northwest" was one of the best in recent memory. I agree! There are many people to thank for this success, starting with our cadre of excellent speakers: John Cornish, Rick Dillhoff, Julian Gray, Bob Jackson, Ray Lasmanis. Tony Potucek, Doug Toland, and Allan Young.

We seldom have so many separate speakers, but this year's topic provided a wealth of local talent. There was much scurrying for pencil and paper as Ray detailed some of the places he'd be looking for the next interesting Northwest mineral discoveries!

Of course, it would not be much of a show if we didn't have exhibits, and this year's displays were appropriately excellent! The Belshazzar gold display with examples from Allan's talk was spellbinding! Look for Bob Meyer's article in this issue for descriptions of each case.

This year, the symposium was a co-event with the Northwest Micro-Mineral Study Group, who shared microscopes, photography demonstrations and free mineral specimens in the Pine room. Thank you to Beth Heesacker for organizing this! As is the case every year, numerous volunteers helped with large and small tasks throughout the weekend. I always forget a few names, but these come to mind:

Scott Ankenbrand – Registration table, All things money related Roger Beck – Setup

Bill and Diana Dameron – Setup and Registration Table

Barb and Julian Gray - Projector and General support

Beth and Paul Heesacker – Micro room organization and security

Karen and Gary Hinderman – Auctions, Facilities liaison, Storage Coordinator, Case Transportation and Setup. Madison Hinderman – Auction helper

Bruce Kelley - Facebook presence, Procure awards, etc...

Al Liebetrau – Dealer liaison and Hotel room wrangler

Tom Menzel - Security, Setup

Doug Merson - Publicity, Packets, Setup

Lucie O'Clair – Auction helper

Bob Meyer – Display coordinator

Allan Young - Speaker recruitment

And probably half a dozen I'm forgetting... Please let me know if I left you off or got your tasks wrong.

Last, but certainly not least, I want to thank our symposium chair, John Lindell, who did an amazing job of making sure the tasks were getting done while making everyone feel unpressured. I wish I had your organizational skills, John!

2017 Noble Witt Award

As Bob Meyer told me when he passed the presidential reins to me several years ago, the best part of being PNWFM president is the privilege of awarding the Noble Witt award at the annual symposium. This year, I was honored to present the award to Douglas Merson for his excellent photographic contributions to the documentation of microminerals and his consistent service to PNWFM. Thank you, Doug, and congratulations!

Member Participation: Even more ways to get involved!



Write an article or send in a few photos for the newsletter. Going to a Tucson? Send us a trip report! Find a weird fuzzy green mineral you'd like to share? Send us a photo whether you can positively identify it or not; I think mysteries are as fun as scholarly certainty. Thanks to Wes Gannaway, Beth Heesacker, Karen Hinderman, Chuck Hobart, Al Liebetrau, Bob Meyer, Don Newsome, Lanny Ream, Alexander Schauss, and myself for providing newsletter content so far this year.

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Plan to attend our 2018 symposium:

October 19-21, 2018 – Minerals of California

"Like" our official Facebook page: facebook.com/PNWFM

Visit the Rice NW Museum of Rocks and Minerals in Hillsboro, OR.

PNWFM members get free admission and store discounts. ricenorthwestmuseum.org

Join the PNWFM board of directors! 2018 will be an election year, so contact me if you are interested in filling a role in the leadership of the club!

The national Friends of Mineralogy board has openings for directors. Do you wish to be involved in FM at a higher level? Contact me and I'll get you in touch with them.

Send me ideas for how PNWFM can better serve you and the mineral collecting community.

Until next time,

-- Bruce Kelley, President, PNWFM



PENNSYLVANIA CHAPTER UPDATE

Symposium and Field Trip Attendance Increases

The Friends of Mineralogy – Pennsylvania Chapter held its 2017 Symposium and field trip on the first weekend in November. The Saturday symposium was held in the Hackman Physical Sciences Building at Franklin & Marshall College, Lancaster, PA.; our Chapter is grateful to have access the facilities there.

The fifty-nine collectors attending heard several talks by experts on minerals, geology and mining in Pennsylvania and beyond. Eight new members joined

FM-Pa at the Symposium.

Chapter President Joe Marchesani had led the efforts to organize this symposium. He started the morning by welcoming the participants, and introduced the speakers.





Stan Mertzman, professor and our host at F&M, spoke on Through the "Looking Glass": Optical Mineralogy and Common Igneous and Metamorphic Minerals and Rocks.



Ron Sloto, PG, discussed history, geology and mineralogy in his talk on The Dyer Diabase Quarries, Berks County, Pennsylvania. (2015 photo)



Bill Stephens, PG, spoke about his experiences with Lapidary Grade Agate and Other Semi-Precious Gemstones from the Penn-MD Serpentine Quarry, Lancaster County, Pennsylvania.



William Kochanov, PhD, detailed The Occurrence of Smoky Quartz Crystals in Northeastern Pennsylvania.



Kent Littlefield, PG, recounted the story of Friedensville Zinc Mines of Southern Lehigh County: Geology, Industrial History, and Environmental Impact.



Select mineral dealers were present, and there was an extensive silent auction, give-away table, refreshments, and plenty of opportunities for visiting with fellow enthusiasts.

The Sunday mineral collecting field trip for symposium registrants was held at H&K Group's Penn/MD Quarry, Peach Bottom, PA. The group drove to the quarry floor, and received a safety briefing and orientation. Polished core samples showed a variety of colors and lots of veining.







The Franklin & Marshall College facilties met our needs very well, as always.



Joanne Moore photo



Dave Johnson photo



A thick coating appearing to be blue opal similar to that at Dyer's Gibralter Quarry was found.



Hydromagnesite crystal clusters.

Ron Sloto photo

Photos in this article by D. Glick unless otherwise noted.

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Southern California Chapter Update

Fall Symposium

Fallbrook Gem & Mineral Society Museum hosted our fall symposium as we drew in SCFM members and guests from Nevada, Colorado and California. We filled the facility with 60 participants for morning symposium power point presentations, silent auction of donated minerals, and docent tours of museum. Jeff Swanger, owner of Ocean View and Pala Chief Mines, gave a professionally prepared power point presentation on the history of mining on Pala Chief Mountain to prepare us for a weekend of field trips to both mines. Pala Chief Mine dates back to 1913 with its discoveries of lithium based minerals that are found in museums around the world. Local resident Jim Anderson, a UCLA Geology graduate, gave a second presentation on Plate Tectonics origin of Peninsula Range pegmatite dikes and the unique lithium based minerals.

The Saturday afternoon field trip program involved a hands-on visit to the Ocean View Mine screening area on Pala Chief Mountain. The first phase involved 25 participants, who were taught how to screen using both dry and wet processes on 8 ft tables from 1-4pm. Simultaneously Steve Carter, a mine employee since 2003, gave half hour educational tours of the historic Pala Chief Mine tunnels with hard hats and headlamps to 44 participants in five separate small group tours. Some participants camped overnight, while others used local motels or homes for the evening.

SCFM and Fallbrook Society members, as well as new members returned to the Ocean View parking lot early Sunday morning between 8-8:30am. Once all 39 participants arrived Jeff Swanger gave them instructions for a 4hr adventure on old Pala Chief Mountain hillside collecting from 9am to 1pm. A few dedicated collectors stayed at the Ocean View screening area as others ended a very successful weekend of collecting gemstones.



Image 1: SCFM's symposium was packed with 60 attendees, some standing along the back wall, leaving a few front row seats empty.



Image 2: A colorful display of donated minerals to be sold at silent auction as fundraiser gathers bidders.

The 38th Annual New Mexico Mineral Symposium By Virgil W. Lueth and Kelsey McNamara

Two hundred and fifty mineral enthusiasts from around the country gathered in Socorro on November 10-12, 2016. A field trip to the Bursum Mine south of Socorro to collect goethite-hematite specimens kicked off the event. Claim owners Alan Perryman and Richard Overley hosted over 80 participants. Alan reported the meeting area looked like "a Walmart parking lot on Black Friday!" Later that evening, a reception for the "Friends of the Museum" was held at the New Mexico Bureau of Geology - Mineral Museum with an abundance of appetizers and a cash bar. The reception is sponsored by John and Maryanne Fender of Richardson, Texas, for the benefit of the museum. Dr. Virgil Lueth, Director of the Mineral Museum, announced the "Friends" successful funding of two projects: 1. A hands -on "Pet"trified Forest project that placed large polished logs

on the museum grounds for the enjoyment of visitors, and 2. Additional lighting for the display cases that will be installed in March, 2018. After the reception, most retired to local motels to buy and sell minerals and enjoyed visiting with friends, old and new.



Photograph of many of the 250 registrants in the Macey Center auditorium for the 38th Annual New Mexico Mineral Symposium.



The "Pet"trified Forest recently installed in front of the New Mexico Bureau of Geology Mineral Museum. The exhibit was paid for by the Friends of the Mineral Museum.

The symposium was opened Saturday by a talk by Michael Michayluk on the micro-minerals of Wind Mountain, New Mexico. The highlight of his talk was the breathtaking micro-minerals he photographed himself. Participants were treated to the "Adventures of the Conglomerate Kid," Tom Rosemeyer, chronicling his latest adventures in Michigan Copper Country. After the famous "burrito break," Barbara Muntyan gave a presentation on the history, minerals, and myths of the Piedmont Mine, Arizona. Alan Perryman subsequently informed the symposium on what he did on his summer vacation - procuring, polishing, and installing the "Petrified Forest" at the museum. After his talk he was formally honored for his polishing skills, especially with regards to coprolites. After lunch, Robert Walstrom updated the mineralogy of the Georgetown district of Grant County, New Mexico. Philip Simmons then relived his 30 years of field collecting in New Mexico, even though he is in his mid-30s! His presentation was followed by a talk on caledonite and linarite from the Blanchard Mine, New Mexico by symposium founder Ray DeMark and Tom Katonak. Terry Huizing was scheduled to be the featured speaker, but due to factors beyond his control, had to bow out. The highly entertaining Bob Jones jumped into the breech and presented a talk on the chalcocites of Bristol, Connecticut, to finish the program for the day.

Following the talks, many in the group participated in the banquet and silent auction to benefit the symposium. Donated minerals, books, and artifacts were offered to the highest bidders. Following the dinner, a live auction of a few larger items completed the evening. A record setting amount was raised at this year's auction, assuring next year's attendees will be able to enjoy another symposium.

The following morning the talks resumed with a presentation by Donna Ware and Jeff Self on the creation of the Sherman Dugan Museum of Geology at San Juan College in Farmington, New Mexico. Patrick Haynes then provided an update on the minerals from the Kelly Mine. Allen

Schmeidicke from Los Alamos, New Mexico, gave his first ever presentation at the symposium on self-collected minerals from the Graphic mine in Magdalena. Steven Veatch introduced the talk on "Cripple Creek, the untold stories" which was finished up very professionally by two of his youth group, Ben Elick and Jenna Salvat. It was good to see the participation of such capable young people at the symposium and bodes well for the future of the mineral hobby. The program was concluded by Anna Domitrovic presenting on the Arizona-Sonora Desert Museum's display of caves and cavelike minerals. In a break with the past, a silent auction to benefit the NM Mineral Museum was hosted by the Albuquerque Gem and Mineral Club concurrently with the morning session. A record amount of proceeds resulted and the symposium closed.

The New Mexico Mineral Symposium is hosted by the New Mexico Bureau of Geology and held annually on the second full weekend of November. Next year the symposium is scheduled for November 9-11, 2018. The symposium is sponsored by the Albuquerque Gem and Mineral Club, Chaparral Rockhounds (Roswell, NM), Los Alamos Geological Society, Grant County Rolling Stones, Friends of Mineralogy (National), White Mountain Gem and Mineral Club (Show Low, AZ), Friends of Mineralogy – Colorado Chapter, and the City of Socorro, New Mexico through direct donations.

Objectives of Friends of Mineralogy

The Friends of Mineralogy (FM) is a national organization with local chapters and is open to membership by all. FM's objective is to promote, support, protect and expand the collection of mineral specimens and to further the recognition of the scientific, economic and aesthetic value of minerals and collecting mineral specimens.

FM seeks to accomplish this in several ways:

FM promotes and supports its regional chapters in order to further regular interaction among mineral collectors, collecting trips, symposia and other projects at the local or regional level. FM, nationally and through its local chapters, supports increased outreach and education on the beauty and importance to humankind of minerals, the scientific value of minerals and mineralogical research, and the rewards of collecting and maintaining a mineral collection.

FM sponsors comprehensive reference articles and publications on mineral localities in the United States and Canada, with an emphasis on providing information of value to mineral collectors on a state or provincial basis.

FM works actively with educational institutions, museums and others to preserve collections accessible to the general public.

FM actively cooperates and has affiliations with other mineralogical organizations and publications.

FM supports policies and agreements designed to preserve access to mineral specimen collecting localities or mining areas in order to assure the preservation of natural wonders.

Approved at Directors Meeting February 2001

FM AFFILIATES



The Friends of Mineralogy is a long-time affiliate of The Mineralogical Record magazine. The magazine was founded in 1970 by John White, who was at that time a curator in the Mineral Sciences Department of the Smithsonian Institution. With the initial help of a financial backer, Arthur Montgomery, White succeeded in launching and bootstrapping the fledgling publication to the point where it was marginally self-sustaining. After seven years as editor and publisher, White stepped aside for a new Editor, Wendell Wilson.

Since then the Mineralogical Record has grown steadily in size, quality and prominence, thanks to the contributions of over 700 authors, photographers, artists, advertisers and donors. It has become a collective labor of love on the part of the entire mineralogical community worldwide. It is the only journal to have a new mineral species named in its honor (minrecordite), and it is the only journal to have received the Carnegie Mineralogical Award. Subscriptions, back issues, books and a variety of free databases are available online at www .Mineralogical Record .com.





MINERALOGICAL SOCIETY OF AMERICA

If you are interested in earth, planetary, industrial, or biologic minerals or mineral-like materials, you may want to learn about the Mineralogical Society of America





Mineralogical Association of Canada







